

No. 16266 ✓

United States
Court of Appeals
for the Ninth Circuit

NEFF INSTRUMENT CORPORATION, a Cor-
poration, Appellant,
vs.

COHU ELECTRONICS, INC., and NEELY EN-
TERPRISES, Appellees.

Transcript of Record

Appeal from the United States District Court for the
Southern District of California,
Central Division

FILED

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PAUL P. O'BRIEN, CLERK

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[Clerk's Note: When deemed likely to be of an important nature, errors or doubtful matters appearing in the original certified record are printed literally in italic; and, likewise, cancelled matter appearing in the original certified record is printed and cancelled herein accordingly. When possible, an omission from the text is indicated by printing in italic the two words between which the omission seems to occur.]

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* Page numbers appearing at bottom of page of Original Transcript of Record.

District Court of the United States, Southern
District of California, Central Division

No. 438-58 Y

NEFF INSTRUMENT CORPORATION, a Cali-
fornia corporation, Plaintiff,

vs.

COHU ELECTRONICS, INC., a Delaware cor-
poration, and NEELY ENTERPRISES, a
California corporation, Defendants.

COMPLAINT FOR INFRINGEMENT OF
UNITED STATES LETTERS PATENT No.
2,832,848

Plaintiff complains of the Defendants and alleges:

I.

This cause of action arises under the patent laws of the United States and this court has jurisdiction pursuant to Title 28 of the United States Code, § 1338(a) and § 1400(b).

II.

The Plaintiff, Neff Instrument Corporation, is a corporation of the State of California and has its principal office at 2211 East Foothill Boulevard, Pasadena, California.

III.

Defendant, Cohu Electronics, Inc., is a corporation of the [2] State of Delaware and has its prin-

principal place of business at 5725 Kearney Villa Road, San Diego, California, and a place of business at 14743 Lull Street, Van Nuys, California.

IV.

Defendant, Neely Enterprises, is a corporation of the State of California and has its principal place of business at 3939 Lankershim Boulevard, Los Angeles, California.

V.

Plaintiff, Neff Instrument Corporation, is the owner of all right, title and interest in and to United States Letters Patent Number 2,832,848, entitled "Electrical Signal Amplifiers", which was duly and regularly issued on April 29, 1958 on an application filed by Glen A. Neff. A copy of said Letters Patent is attached hereto as Exhibit "A". All right, title and interest in and to said patent was assigned to the Plaintiff, Neff Instrument Corporation on April 29, 1958, together with the right to recover for all past and future infringements.

VI.

Defendant, Cohu Electronics, Inc., has within the six (6) years last past wilfully and wantonly infringed and is now infringing said United States Letters Patent Number 2,832,848, by manufacturing, using and selling in the Southern District of California and elsewhere in the United States, electrical signal amplifiers embodying the inventions covered by said Letters Patent, and threatens and will continue to infringe said Letters Patent unless

enjoined therefrom by this court. The electrical signal amplifiers now known to infringe said Letters Patent are incorporated in the devices manufactured, used and sold by the Defendant, Cohu Electronics, Inc., under its Model No. 114-A.

VII.

Defendant, Neely Enterprises, has within the six (6) years last past wilfully and wantonly infringed and is now infringing [3] said United States Letters Patent Number 2,832,848, by using and selling in the Southern District of California and elsewhere in the United States, electrical signal amplifiers manufactured by the Defendant, Cohu Electronics, Inc., embodying the inventions covered by said Letters Patent, and threatens and will continue to infringe said Letters Patent unless enjoined therefrom by this court.

VIII.

Electrical signal amplifiers manufactured and sold by Plaintiff incorporating the inventions covered by said Letters Patent enjoy a wide acceptance in the trade and have become identified with Plaintiff. Soon after said electrical signal amplifiers manufactured by Plaintiff appeared on the market, Defendants, and each of them, became aware of the market and good will in the sale of such amplifiers established by Plaintiff and undertook the manufacture and sale of such amplifiers in the Southern District of California and elsewhere, thereby wrongfully appropriating such mar-

ket and good will to the detriment of Plaintiff. Plaintiff has been damaged by the Defendants, and each of them, by the acts herein complained of, and will suffer further damage and injury unless the said Defendants are enjoined from said acts of infringement and wrongful invasion of Plaintiff's rights.

IX.

Plaintiff has placed the required statutory notice pursuant to Title 35 United States Code § 287 on all electrical signal amplifiers which it has manufactured and sold under said Letters Patent since the issue date thereof.

Wherefore, Plaintiff prays that:

1. This court issue a preliminary and final judgment against further infringement of said Letters Patent by said Defendants, and each of them, their agents, servants, employees, officers and those persons in active concert or participation with the said [4] Defendants, and each of them;

2. This court order an accounting and judgment against Defendants of and for all damages suffered by Plaintiff by reason of Plaintiff's rights in said invention and by reason of said infringement of said Letters Patent, and that such accounting for damages shall be not less than a reasonable royalty based upon the aggregate sales price of devices sold by said Defendants embodying structures included within the terms of said Letters Patent;

3. Plaintiff be awarded its costs against Defend-

ants, and each of them, and reasonable attorney fees; and

4. Plaintiff be awarded such other and further relief as this court may deem just and proper.

Los Angeles, California, May 12, 1958.

ROBERT H. FRASER, and
RICHARD B. HOEGH,

/s/ By ROBERT H. FRASER,
Attorneys for Plaintiff. [5]

[Endorsed]: Filed May 12, 1958.

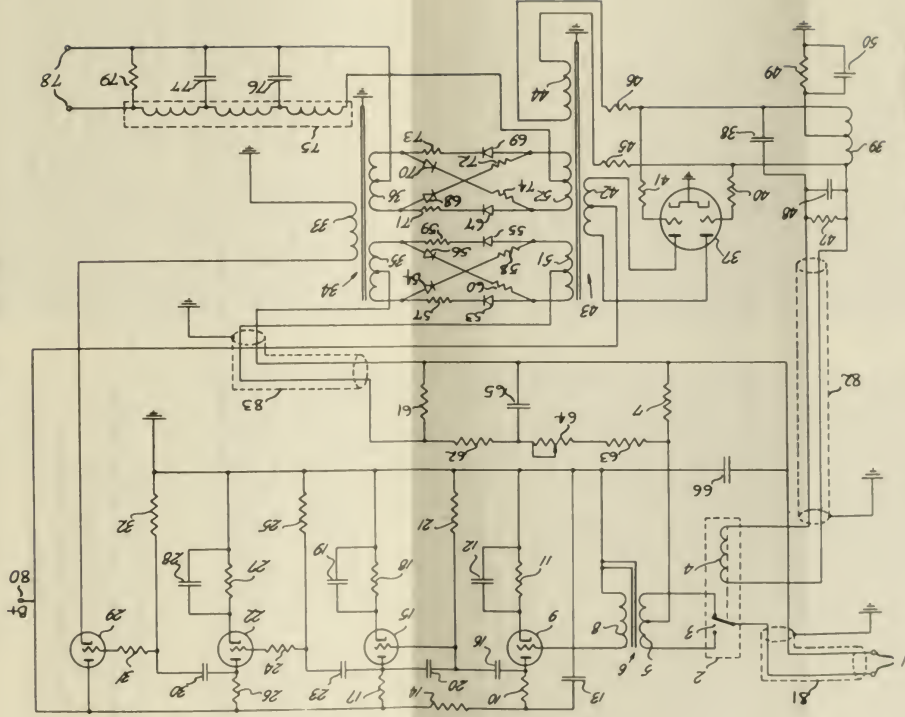


April 29, 1958

2,832,848

G. A. NEFF
ELECTRICAL SIGNAL AMPLIFIERS

Filed Jan. 16, 1957

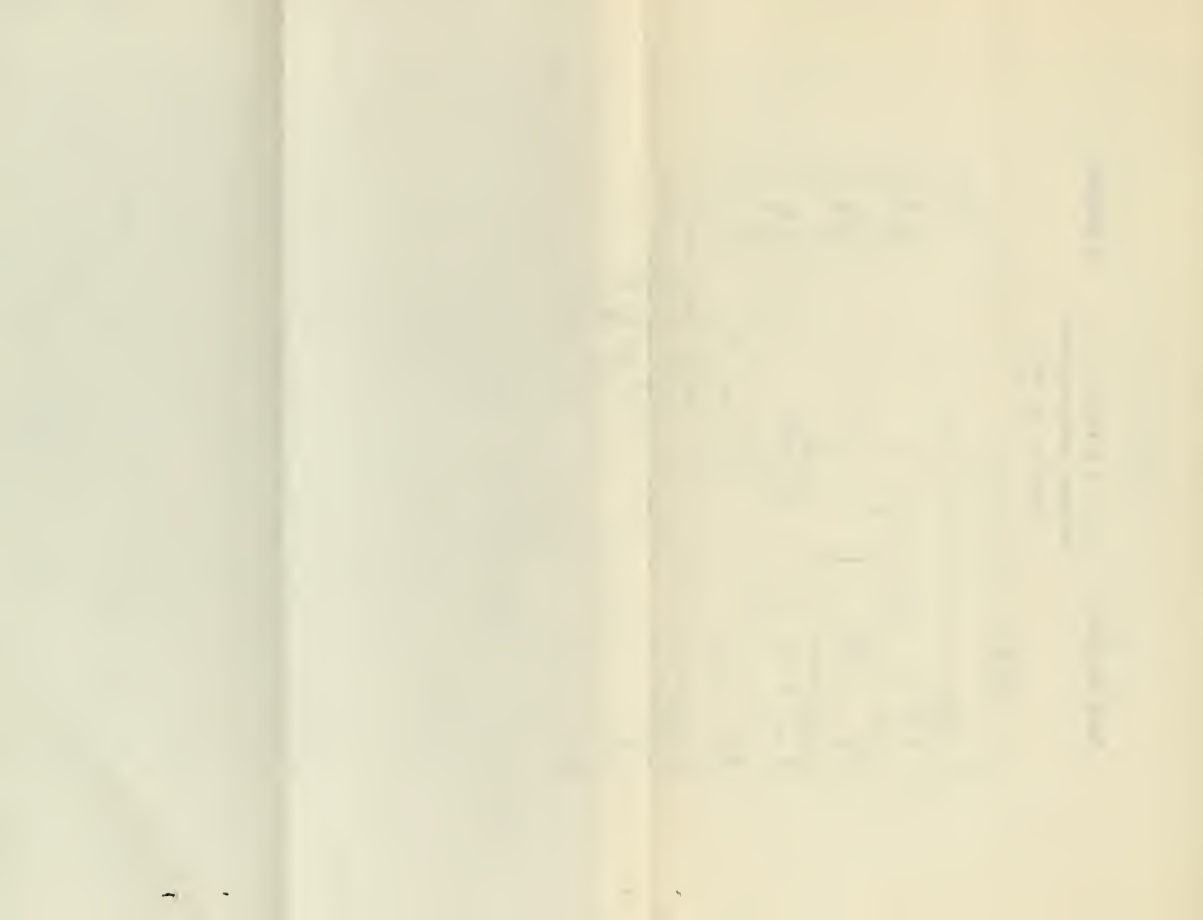


INVENTOR

GUYN A. NEFF

BY *Robert H. Pinner*

ATTORNEY



2,832,848

ELECTRICAL SIGNAL AMPLIFIERS

Glyn A. Nefz, Pasadena, Calif.

Application January 16, 1957, Serial No. 634,569

11 Claims. (Cl. 175—171)

This application relates to electrical signal amplifiers and more particularly to an electrical signal amplifier in which low frequency and unidirectional electrical signals are amplified by means of a modulated alternating current carrier wave.

Electrical signal amplifiers are frequently employed to generate relatively strong output signals corresponding to relatively weak input signals. Often an electrical signal comprising an input signal includes low frequency and unidirectional (D. C.) components, e. g. a direct current component which fluctuates in accordance with a variable. Conventional electrical signal amplifiers generally are unsuitable for use in amplifying signals including low frequency and unidirectional components since they include coupling circuits which tend to block the passage of signals having low frequency limits, so that low frequency and unidirectional components are lost in the amplification process. One way in which signals having low frequency and unidirectional components may be amplified is by means of an amplifier which is direct coupled between stages. However, it is well known that the overall gain of a direct coupled amplifier tends to be unstable since the aging of the electron tubes and components affects the overall gain of the amplifier. An additional disadvantage of a direct coupled amplifier is that each succeeding amplification stage generally must be elevated in electrical potential because the direct coupling between amplification stages applies the operating voltage from each stage to the next successive stage.

In order to avoid the aforementioned difficulties, unidirectional and low frequency signals to be amplified may be converted to a modulated alternating current carrier wave which is amplified by an alternating current amplifier which need not be direct coupled between amplification stages. If an output signal having unidirectional and low frequency components is desired, the amplified modulated alternating current carrier wave may be reconverted to a signal corresponding to the input signal having low frequency and unidirectional components.

It is well known that the stability of an amplifier in which a low frequency or unidirectional signal is converted to a modulated alternating current carrier wave for amplification may be increased by including a negative feedback circuit which applies a portion of an output signal to an input circuit in a direction which tends to reduce the input signal. However, where a feedback circuit is connected between an output circuit and an input circuit the result is that the input circuit is electrically connected to the output circuit. Where the input circuits and output circuits are to be maintained at different biasing potentials or where the input circuits of several amplifiers sharing a common output circuit must be electrically separate, it is essential that no electrical connection be made via a feedback circuit between input and output circuits. Heretofore, to provide isolated input circuits and output circuits where a feedback circuit is required, it has been necessary to include a mechanical

linkage. For example, a motor may be positioned in accordance with an output signal from an amplifier, and an electrical signal generating device, such as a potentiometer, may be linked to the motor and electrically connected in the feedback circuit. By means of the potentiometer, a feedback voltage is provided without electrically connecting the input circuit and the output circuit. Where the output circuit must be electrically separated from both the input circuit and the feedback circuit, it has been necessary to link an additional potentiometer to the motor which is positioned to generate an output signal.

In any system in which a mechanical linkage is included to isolate the input, output and feedback circuits, the elements of the mechanical linkage possess a certain amount of inertia which limits the capability of the system as a whole to respond to relatively fast variations in the input signal. Accordingly, an amplifier which includes a mechanical linkage is not suitable where rapidly varying signals must be amplified. Heretofore, there has been on satisfactory way to isolate the amplifier input circuits from the amplifier output circuits while at the same time preserving the amplifier's ability to amplify rapidly fluctuating input signals including low frequency and unidirectional components. Accordingly, it is one object of the invention to provide a new and improved amplifier in which the input circuit and output circuit are electrically isolated from each other.

It is another object of the invention to provide an amplifier which is capable of responding to input signals which vary rapidly and in which the input circuit is electrically isolated from the output circuit.

It is an additional object of the invention to provide a new and improved amplifier having a feedback circuit. It is still another object of the invention to provide a new and improved amplifier in which low frequency and unidirectional feedback signals are derived from an alternating current signal.

In accordance with the invention, an amplifier is provided having electrically separate input and output circuits in which an input signal is converted to a modulated alternating current carrier wave, the modulated alternating current carrier wave is amplified, a feedback signal including low frequency and unidirectional components is derived from the amplified modulated alternating current carrier wave, and an output signal is derived by a means separate from the means for deriving the feedback signal.

A better understanding of the invention may be had from the following detailed description taken in conjunction with the drawing, in which the single figure is a schematic circuit diagram of an amplifier including an illustrative embodiment of the invention.

In the amplifier of the drawing, an input signal including unidirectional (D. C.) components of either polarity may be applied to a pair of terminals 1. An input circuit to which the terminals 1 are connected includes a converter or modulator in the form of a vibrator-type circuit interrupter 2 which includes a set of single-pole double-throw switch contacts 3 and an actuating coil 4. When the actuating coil 4 is energized with alternating current, the switch contacts 3 open and close to connect one of the input terminals 1 alternately to opposite ends of the primary winding 5 of a transformer 6. A center tap on the primary winding 5 via a resistor 7, across which appears a feedback signal which is described in detail below.

Due to the application of the input signal alternately to opposite ends of the primary winding 5, an alternating current signal appears across the primary winding 5 which is coupled to a secondary winding 8 of the transformer 6 in the form of a carrier wave which is amplitude modu-

lated in accordance with the signal applied to the terminals 1. In addition, the alternating current signal appearing across the secondary winding 8 bears a phase relationship to the alternating current wave applied to the actual coil 4 which corresponds to the polarity of the input signal. That is, for a positive input signal the alternating current signal is of one phase, and for a negative input signal the alternating current signal is of opposite phase. The alternating current signal from the secondary winding 8 is applied to the control electrode of an amplifier tube 9. Operating voltage is applied to the anode of the electron tube 9 via a load resistor 10. A conventional cathode resistor 11 and a by-pass capacitor 12 are connected in parallel to the cathode of the electron tube 9. A decoupling capacitor 13 maintains the end of the load resistor 10 away from the electron tube 9 at substantially ground potential for alternating currents and a resistor 14 is connected serially with the load resistor 10 to isolate the amplifier tube 9 from the remainder of the circuit.

At the anode of the electron tube 9 an alternating current signal appears which is passed to the control electrode of a second amplifier electron tube 15 via a coupling capacitor 16. A conventional load resistor 17 is connected to the anode of the electron tube 15 and a cathode resistor 18 and by-pass capacitor 19 are connected to the cathode of the electron tube 15. In addition, a capacitor 20 is connected between the anode and control electrode of the electron tube 15 to stabilize the amplifier circuit and eliminate oscillations. A conventional grid leak resistor 21 is connected between the control electrode of the electron tube 15 and ground reference potential.

The alternating current signal appearing at the anode of the electron tube 15 is applied to the control electrode of a third amplifier electron tube 22 via a coupling capacitor 23 and a grid current limiting resistor 24. A conventional grid leak resistor 25 returns the control electrode to ground reference potential, a load resistor 26 is connected to the anode, and a cathode resistor 27 and by-pass capacitor 28 are connected in parallel to the cathode of the electron tube 22.

The alternating current signal appearing at the anode of the electron tube 22 is passed to the control electrode of a cathode follower electron tube 29 via a coupling capacitor 30 and a grid current follower resistor 31. The control electrode of the cathode follower electron tube 29 is returned to ground reference potential via the resistor 31 and a grid leak resistor 32.

In a conventional manner, operating voltage is applied directly to the anode of the cathode follower electron tube 29, and a primary winding 33 of an output transformer 34 is connected serially with the cathode of the electron tube 29. The circuit of the cathode follower electron tube 29 functions as an impedance changing device to couple the amplifier of the electron tubes 9, 15, and 22 to the load presented by the transformer 34.

The output transformer 34 includes two separate secondary windings 35 and 36, across each of which appears an alternating current signal. Connected to each of the secondary windings 35 and 36 is a separate synchronous demodulator which is adapted to compare alternating currents of the same frequency and provide an output signal as a result of the comparison. The synchronous demodulators are described in detail below.

An alternating current wave which is employed as a reference wave may be generated by means of an oscillator which includes a double-triode electron tube 37. A frequency determining tank circuit is included in the oscillator comprising a capacitor 38 and an inductance which is provided in part by a coil 39 and in part by the inductance of the coil 4 of the converter 2. In operation, the capacitor 38 and the coils 4 and 39 have a predetermined resonant frequency which may be, for example, 400 cycles per second.

node of the double-triode electron tube 37 via the resistors 40 and 41. In operation, the sections of the electron tube 37 are alternately rendered conducting and the resistors 40 and 41 limit the grid current flow in such a way as to generate a substantially square wave switching wave between the anodes of the electron tube 37. The square wave switching wave is applied across a center tapped primary winding 42 of a transformer 43. A feedback circuit for the oscillator is provided by means of a secondary winding 44 of the transformer 43 which is connected to the tank circuit coil 39 via a pair of isolation resistors 45 and 46. In practice it has been found that there is a tendency for parasitic oscillation to occur in the converter coil 4. For this reason a damping resistor 47 and capacitor 48 are connected across the coil 4. In order to provide biasing for the electron tube 37 and a return circuit from the cathode of the electron tube 37 to the tank circuit, a resistor 49 and a by-pass capacitor 50 are connected in parallel between a center tap on the coil 39 and ground reference potential.

The alternating current switching wave appearing across the primary winding 42 is induced in a pair of secondary windings 51 and 52 of the transformer 43.

The reference wave generated by the oscillator is used for the purpose of driving the actuating coil 4 of the converter 2. In addition, an alternating current wave from the oscillator is applied to the synchronous demodulators in which the amplified alternating current signal is compared with the reference wave. Thus, by means of the oscillator the reference wave applied to the synchronous demodulators bears a fixed phase relationship to the opening and closing of the contacts 3 and also bears a fixed phase relationship to the alternating current signal.

A feedback circuit synchronous demodulator includes a secondary winding 51 of the transformer 43 and a secondary winding 35 of the transformer 34. Connected between the secondary windings 35 and 51 is a ring-type demodulator which includes four diodes 53, 54, 55, and 56. Each of the diodes 53-56 has a resistor 57, 58, 59, 60 connected serially therefor for the purpose of minimizing the effect of any disadvantages in the characteristics of the diodes 53-56 and to limit the maximum current flow therethrough. In operation, when the reference wave introduced across the secondary winding 51 is of the same phase as the alternating current signal appearing across the winding 35, a signal corresponding to the input signal, including low frequency components and a unidirectional component of a given polarity appears between the center tap connections on the secondary windings 35 and 51. In contrast, when the reference wave appearing across the winding 51 is of opposite phase to the alternating current signal appearing across the winding 35, a signal corresponding to the input signal appears between the center tap connections to the secondary windings 35 and 51 having a unidirectional component which is of opposite polarity to the aforementioned component polarity. The magnitude of the unidirectional component is a function of the relative amplitudes of the reference wave and the alternating current signal. Since the reference wave is of a much larger amplitude than the alternating current signal, the unidirectional component has a magnitude which varies in accordance with the amplitude of the alternating current signal. Thus, a signal is generated by the feedback circuit synchronous demodulator which has a polarity corresponding to the phase of the alternating current signal and a magnitude corresponding to the amplitude of the alternating current signal.

Since the phase and amplitude of the alternating current signal correspond to the input signal as described above, the signal provided by the feedback circuit synchronous demodulator represents an amplified version of the input signal including both low frequency and unidirectional components as well as any upper frequency components appearing therein. The signal derived from the center tap connections on

the secondary windings 35 and 51 appears across a resistor 61. The signal appearing across the resistor 61 is applied to a voltage divider comprising the fixed resistors 62, 63, and 7, and an adjustable resistor 64. A by-pass capacitor 65 functions to filter the unwanted alternating current demodulation products from the feedback signal so that a low frequency and unidirectional feedback signal appears across the resistor 7. By varying the adjustable resistor 64 the amount of feedback can be controlled which functions to vary the overall gain of the amplifier.

The feedback circuit is a negative or inverse feedback arrangement in which the signal appearing across the resistor 7 opposes the input signal applied to the terminals 1. A capacitor 66 returns one side of the input circuit to ground reference potential for alternating current. Where the input transformer 6 includes appropriate shielding between the primary winding 5 and the secondary winding 9, the capacitor 6 may be omitted so that the input circuit it truly floats for all frequencies of input signals applied thereto. Since the transformers 34 and 43 are adapted to pass only alternating current the feedback circuit synchronous demodulator floats with the input circuit and is conductively isolated from the remainder of the circuit and from ground reference potential.

In a similar fashion, an output signal including unidirectional and low frequency components may be derived from an output circuit synchronous demodulator which includes the secondary winding 52 of the transformer 43 and the secondary winding 36 of the transformer 34. The output circuit synchronous demodulator includes four diodes 67, 68, 69, and 70 which are each connected serially with a resistor 71, 72, 73, 74 for the purpose of minimizing the effect of any dissimilarities in the diodes 67-70 and limiting the current flow therethrough.

Across the center tap connections to the secondary windings 36 and 52 appears a signal corresponding to the relative phases and amplitudes of the reference wave appearing across the winding 52 and the alternating current signal appearing across the winding 36. The signal appearing between the center tap connections to the windings 36 and 52 is applied to a filter circuit which includes an inductance 75 having three separate sections and the filter capacitors 76 and 77. The inductance 75 and filter capacitors 76 and 77 effectively remove substantially all alternating current signal components of the frequency of the reference wave and higher from the signal so that a signal appears at the output terminals 78 corresponding to an amplified version of the input signal. A resistor 79 is connected across the terminals 78 to terminate the filter in a proper impedance.

The following list of electron tube types and component values is given by way of example, being indicative only of one workable embodiment:

Electron tubes 9, 15, 22, 29, 31	Triode section of tube type 12AY7.
Electron tube 37	Tube type 5687.
Resistor 7	310 ohms.
Resistors 10, 17, 26	100,000 ohms.
Resistors 11, 18, 27, 45, 46	1,000 ohms.
Resistors 14, 24, 31	47,000 ohms.
Resistors 21, 25, 32	470,000 ohms.
Resistors 40, 41	6,800 ohms.
Resistor 47	22 ohms.
Resistor 49	22,000 ohms.
Resistors 57, 58, 59, 60, 71, 72, 73, 74	300 ohms.
Resistors 61, 79	100 ohms.
Resistor 62, 63	15,000 ohms.
Resistor 64	10,000 ohms.
Capacitors 12, 19, 28	100 microfarads.
Capacitor 20	100 microfarads.
Capacitor 13	10 microfarads.
Capacitors 16, 23, 30	.1 microfarad.

Capacitors 38, 65, 66	1 microfarad.
Capacitor 48	.022 microfarad.
Capacitor 50	25 microfarads.
Capacitors 76, 77	18 microfarads.
Coil 39	150 millihenries.
Inductance 75	3 sections; 90 millihenries; 180 millihenries and 90 millihenries.

The connections made to the core symbols in the drawing for each of the transformers 6, 34 and 43 indicate that the transformers are of the type which include an electrostatic shield for reducing capacitive coupling between the windings whereby energy is transferred by the inductive action of the transformers only.

The dashed enclosures 81, 82, and 83 surrounding the connections to the input terminals 1, the connections to the converter coil 4 and the connections between the feedback circuit synchronous demodulator and the resistor 61 indicate that in a preferred embodiment, shielded cables should be used with the shields being connected to ground reference potential.

It will be appreciated that a conventional heater winding is included in each of the several electron tubes 9, 15, 22, 29 and 37 for elevating the cathodes to electron emission temperature although the actual heater symbols and connections have been omitted to simplify the drawing. Suitable voltages for energizing the heaters along with a positive operating potential may be derived from any conventional power supply (not shown). The positive operating potential may be applied to the anodes of all the electron tubes between a terminal 80 and ground reference potential.

In accordance with the invention, the exemplary embodiment includes an amplifier in which a unidirectional input signal is converted to an alternating current signal for amplification, the feedback circuit supplies a feedback signal corresponding to the input signal to the input circuit without affecting the electrical isolation of the input circuit from the remainder of the amplifier, and the output circuit is conductively isolated from the input circuit and the remainder of the amplifier. The output circuit may be arranged by means of a synchronous demodulator to provide an output signal having unidirectional and low frequency components as well as upper frequency components appearing in the input signal.

Although a specific demodulator circuit has been shown, it will be appreciated that other types of comparison circuits may be employed. Accordingly, the words "synchronous demodulator" as used herein, are intended to have general meaning and to cover any form of comparison circuit which is adapted to provide a signal or voltage representing a comparison between an alternating current signal and a reference wave.

Although an exemplary embodiment of the invention has been illustrated and specific circuit component values have been given, the invention is not limited thereto. Accordingly, the accompanying claims are intended to include all equivalent arrangements falling within the scope of the invention.

What is claimed is:

1. Apparatus including the combination of an input circuit for receiving an input signal, means connected to the input circuit for generating an alternating current wave modulated in accordance with the input signal, an amplifier coupled to the generating means to receive said alternating current wave, a negative feedback circuit connected to the input circuit, said feedback circuit including a demodulator coupled to the amplifier to derive a negative feedback voltage from an amplified alternating current wave from the amplifier, an output circuit coupled to the amplifier, and means for conductively isolating the output circuit from the input and feedback circuits.

2. Apparatus for amplifying an input signal having a unidirectional component including in combination a con-

verter for generating an alternating current signal representing the input signal, an alternating current signal amplifier coupled to the converter, a pair of synchronous demodulators each of which is adapted to generate a voltage representing a comparison between an alternating current signal and an alternating current reference wave, each of said synchronous demodulators being conductively isolated from the other, means applying an alternating current reference wave to both of said synchronous demodulators, means coupling the alternating current signal amplifier to both of the synchronous demodulators, means deriving a negative feedback voltage from one of the synchronous demodulators, and means deriving an output voltage from the other of the synchronous demodulators.

3. In an amplifier in which an input circuit is electrically separated from an output circuit, the combination of an input circuit for receiving an input signal, said input circuit including a converter for generating an alternating current signal modulated in accordance with the input signal, an alternating current signal amplifier, means coupling the converter to the alternating current signal amplifier for the passage of alternating current signals only, a feedback circuit demodulator, means coupling the alternating current signal amplifier to the feedback circuit demodulator for the passage of alternating current signals only, means connected between the feedback circuit demodulator and input circuit for opposing a feedback voltage derived from the feedback circuit demodulator to the input signal in the input circuit, an output circuit demodulator conductively isolated from the feedback circuit demodulator and the input circuit, means coupling the alternating current signal amplifier to the output circuit demodulator for the passage of alternating current signals only, and means driving the feedback and output circuit demodulators and the converter synchronously whereby both the feedback voltage and the output voltage include any low frequency or unidirectional components appearing in the input signal.

4. In an amplifier of the type in which input signals are converted to alternating current signals of predetermined frequency for amplification, the combination of an input circuit, a converter coupled to the input circuit for generating alternating current signals having a predetermined frequency of reversible phase and variable amplitude corresponding to the polarity and magnitude of signals applied to the input circuit, an alternating current signal amplifier coupled to the converter to receive alternating current signals only, a negative feedback circuit coupled between the alternating current signal amplifier and the input circuit, said feedback circuit including a synchronous demodulator which is coupled to the alternating current signal amplifier to receive alternating current signals only, an output circuit coupled to the alternating current signal amplifier, means for conductively isolating the output circuit from the input and feedback circuits, said output circuit including a synchronous demodulator which is coupled to the alternating current signal amplifier to receive alternating current signals only, and a source of alternating current waves of said predetermined frequency coupled to the feedback and output circuit synchronous demodulators.

5. In an amplifier of the type in which an input signal is converted to an alternating current signal for amplification, the combination of an input circuit for receiving input signals, a converter connected to the input circuit for generating alternating current signals of predetermined frequency having a reversible phase and variable amplitude corresponding to the polarity and magnitude of the input signal, an alternating current signal amplifier coupled to the converter to receive alternating current signals only, a negative feedback circuit coupled between the alternating current signal amplifier and the input circuit, said feedback circuit including a synchronous de-

modulator which is coupled to the alternating current signal amplifier to receive alternating current signals only, an output circuit conductively separate from the feedback circuit demodulator and the input circuit, said output circuit including a synchronous demodulator which is coupled to the alternating current signal amplifier to receive alternating current signals only, and a source of alternating current waves of said predetermined frequency coupled to said converter, said feedback circuit synchronous demodulator, and said output circuit synchronous demodulator.

6. An amplifier including the combination of an input circuit for receiving a signal having unidirectional and low frequency components, a converter coupled to the input circuit for providing an alternating current signal modulated in accordance with a signal applied to the input circuit, an amplifier coupled to the converter to receive alternating current signals, a feedback circuit demodulator coupled between the amplifier and the input circuit for deriving a negative feedback voltage from an amplified alternating current signal from the amplifier, an output circuit coupled to the amplifier, means for conductively isolating the output circuit from the input circuit and the feedback circuit demodulator and the converter synchronously whereby the feedback voltage includes unidirectional and low frequency components corresponding to an input signal applied to the input circuit.

8. Apparatus for amplifying an input signal, including the combination of an input transformer having at least one primary winding and at least one secondary winding, an input circuit including a converter coupled to the primary winding for generating an alternating current signal modulated in accordance with an input signal applied to the input circuit, an amplifier coupled to the secondary winding, an output transformer having at least one primary winding and at least one secondary winding, said output transformer primary winding being connected to said amplifier, a feedback circuit demodulator connected between the output transformer secondary winding and the input circuit, an output circuit coupled to the amplifier, and means for conductively isolating the output circuit from the input circuit and the feedback circuit demodulator.

9. Apparatus in accordance with claim 8 including means for driving the converter and the feedback circuit demodulator synchronously.

10. Apparatus in accordance with claim 8 including an output circuit demodulator coupled to a secondary winding of the output transformer conductively isolated from the feedback circuit demodulator to which the feedback circuit demodulator is connected.

11. Apparatus in accordance with claim 10 including means for driving the converter, the feedback circuit demodulator and the output circuit demodulator synchronously.

References Cited in the file of this patent

UNITED STATES PATENTS

2,297,543 Herhardt et al. Sept. 29, 1942
2,719,191 Hermes Sept. 27, 1955
2,773,137 Hollmann Dec. 4, 1956
2,795,648 Mason June 11, 1957

FOREIGN PATENTS

115,412 Australia July 9, 1942
857,402 Germany Nov. 27, 1952

[Title of District Court and Cause.]

ANSWER

Come Now the defendants and in answer to the complaint herein allege, aver and deny as follows:

I.

Answering Paragraph I of the complaint, defendants admit that the causes of action attempted to be stated herein are laid under the patent laws of the United States, but defendants deny that this court has jurisdiction under Title 28 of the United States Code, § 1338(a) and § 1400(b).

II.

Answering Paragraph II of the complaint, defendants admit the allegations contained therein.

III.

Answering Paragraph III of the complaint, defendants admit the allegations contained therein.

IV.

Answering Paragraph IV of the complaint, defendants admit the allegations contained therein.

V.

Answering Paragraph V of the complaint, defendants allege that they are without knowledge or information sufficient to form a belief as to the truth of the allegations contained therein and therefore deny said allegations for want of such knowledge or information.

VI.

Answering Paragraph VI of the complaint, defendants deny each and every allegation contained therein.

VII.

Answering Paragraph VII of the complaint, defendants deny each and every allegation contained therein.

VIII.

Answering Paragraph VIII of the complaint, defendants deny each and every allegation contained therein.

IX.

Answering Paragraph IX of the complaint, defendants allege that they are without knowledge or information sufficient to form a belief as to the truth of the allegations contained therein and therefore deny said allegations for want of such knowledge or information.

X.

Further answering said complaint and for a separate and complete defense thereto, defendants allege that this court lacks jurisdiction of this case in that all of the Cohu Electronics, Inc. model No. 114A amplifiers manufactured and/or sold by defendants have been manufactured and/or sold for the United States Government within the meaning of Title 28 U.S.C. Section 1498 and that plaintiff's sole remedy in the premises is an action [21] against the United States in the Court of Claims.

XI.

Further answering said complaint and for a sepa-

rate and complete defense thereto, defendants allege that pretended United States Letters Patent No. 2,832,848 are invalid and void because the original inventor named therein was not the original and first inventor of the alleged improvement described and claimed therein, but the same in all its material and substantial parts was invented, known and used by others in this country before his alleged invention or discovery thereof, was patented and described in printed publications in this and foreign countries before his alleged invention or discovery thereof or more than one year prior to his application for patent and was in public use and on sale in this country more than one year prior to his application for patent.

(a) The patents and publications above referred to insofar as they have at present been ascertained are as follows:

Inventor—Patent No.—Date:

Milnor—1,378,712—May 17, 1921.

Espenschied—1,428,156—September 5, 1922.

Whitelock—1,925,160—September 5, 1953.

Black—2,102,671—December 21, 1937.

Gunn—2,114,298—April 19, 1938.

Vance—2,190,743—February 20, 1940.

Perkins—2,210,001—August 6, 1940.

Skillman—2,210,956—August 13, 1940.

Six—2,221,116—November 12, 1940.

Pieplow—2,226,288—December 24, 1940.

Bruck—2,269,249—January 6, 1942.

Haantjes—2,290,553—July 21, 1942.

Eberhardt et al.—2,297,543—September 29, 1942.

Seargent—2,413,788—January 7, 1947. [22]
 Mosely et al.—2,459,177—January 18, 1949.
 Williams, Jr.—2,459,730—January 18, 1949.
 Liston—2,497,129—February 14, 1950.
 Tarpley—2,622,192—December 16, 1952.
 Goldberg et al.—2,684,999—July 27, 1954.
 Hermes—2,719,191—September 27, 1955.
 Gilbert—2,744,168—May 1, 1956.
 Hollomann—2,773,137—December 4, 1956.
 Mason—2,795,648—June 11, 1957.

Foreign

Australia—115,412—July 9, 1942.
 Germany—857,402—November 27, 1952.

Magazine Articles

“Feedback Improves Response of D-C Amplifier”,
 by Joseph F. Lash; *Electronics*, pub. by McGraw-
 Hill Book Co., Inc., for February 1949, pp. 109-111.

“D-C Amplifier Stabilized for Zero and Gain”, by
 A. J. Williams, Jr., R. E. Tarpley, W. R. Clark,
 of Leeds & Northrup Co. Presentation before
 A.I.E.E. at Pittsburgh, Pa., Jan. 26-30, 1948.
 A.I.E.E. Tech. Paper 48-9 made available for print-
 ing Nov. 26, 1947. Printed in *Transactions of Ameri-
 can Institute of Electrical Engineers*, 1948, pp.
 47-57.

Books

“Radio Engineers Handbook”, Terman, McGraw-
 Hill Book Co., Inc., pub. 1943, pp. 654, 655, 656.

“Radio Engineering”, Terman, 3rd Edition, Mc-
 Graw-Hill Book Co., Inc., pub. 1947, pp. 733-738.

“Waveforms”, Chance, Hughes, McNichol, Sayre & Williams, pub. 1949, McGraw-Hill Book Co., Inc., Chapter 11, pp. 389-426. [23]

(b) The instances of prior invention, knowledge, use and sale above referred to insofar as they have at present been ascertained are as follows: By the patentees of the patents cited in Paragraph (a) above at the addresses given in said patents.

(c) Defendants beg leave to add hereto by amendment to this answer additional patents and publications and instances of prior invention, knowledge, use and sale above referred to when ascertained.

XII.

For a further, separate and complete defense to the complaint herein, defendants allege that by reason of the proceedings in the United States Patent Office during prosecution of the application which resulted in said pretended United States Letters Patent No. 2,832,848, and the admissions and representations therein made by or in behalf of the alleged inventor in order to induce the grant of said pretended Letters Patent, the plaintiff is estopped to claim for said pretended Letters Patent a construction, were the same otherwise possible, as would cause said pretended Letters Patent to cover or include any device or apparatus manufactured, used or sold by the defendants.

XIII.

Defendants allege that said pretended Letters Patent of the United States No. 2,832,848 are in-

valid and void because the alleged improvements described and claimed therein do not constitute patentable subject matter within the meaning of the Patent Laws, in view of the prior state of the art and what was common knowledge on the part of those skilled in the art, all prior to the dates of the alleged inventions thereof by the patentees named therein.

XIV.

Further answering said complaint and as a further, separate and complete defense thereto, defendants allege that [24] pretended Letters Patent No. 2,832,848 are invalid and void as each of the claims thereof fails to particularly point out and distinctly claim the subject matter thereof as required by Title 35 U.S.C. Section 1112.

XV.

Further answering said complaint, and as a further, separate and complete defense thereto, defendants allege that plaintiff comes into this court with unclean hands and cannot prevail against the defendants in that, on information and belief, plaintiff's predecessor, inventor, president and sole stockholder, G. A. Neff, conceived the subject matter of his pretended Letters Patent while he was employed by another under terms and conditions which required him to disclose such invention to his employer and if necessary to assign any invention to such employer, and that for the purpose of defrauding said employer, said G. A. Neff concealed the fact that he had made the invention purported to

be patented in pretended Letters Patent No. 2,832,848 and neglected to file an application for Letters Patent of the United States thereon until after he had severed relations with his previous employer, and that plaintiff is chargeable with full knowledge of the acts of said G. A. Neff aforesaid to the extent that to permit the plaintiff to prevail herein would require this court to assist the plaintiff in perpetrating a fraud upon said Neff's former employer.

Wherefore, defendants pray that the complaint herein be dismissed and that defendants recover their costs and disbursements incurred herein, including reasonable attorneys' fees.

LYON & LYON,

By s/ CHARLES G. LYON,

Attorneys for Defendants. [25]

Acknowledgment of Service Attached. [26]

[Endorsed]: Filed July 18, 1958.

[Title of District Court and Cause.]

MOTION FOR SUMMARY JUDGMENT

Come now the defendants, Cohu Electronics, Inc., and Neely Enterprises, through their attorneys, and move this Honorable Court to enter the enclosed

19-a *Neff Instrument Corporation vs.*

Findings of Fact, Conclusions of Law and Summary Judgment.

Upon the hearing of this motion, defendants will rely upon the affidavits of Richard Silberman and Thomas Hamilton and the annexed Memorandum of Points and Authorities.

Dated this 21st day of July, 1958.

LYON & LYON

By /s/ CHARLES G. LYON,
Attorneys for Defendants.

[Title of District Court and Cause.]

AFFIDAVIT OF RICHARD T. SILBERMAN
AND THOMAS M. HAMILTON

State of California,
County of San Diego—ss.

Richard T. Silberman and Thomas M. Hamilton, each being first duly sworn, each for himself deposes and says: that each is a Vice President of the defendant, Cohu Electronics, Inc., and each has direct knowledge of the sales and deliveries of all 114A amplifiers manufactured and sold by defendant. That such amplifiers have been sold and delivered to date to the following purchasers in con-

nection with Government prime contracts and under purchase orders as follows:

Customer	Customer Purchase Order No.	Government Contract No.	Quantity	Rating
General Electric	022-8757	AFW33-038- AC-22193	1	
Edgerton Germes- hausen and Grier	J-35108	AT(29-1)1183	6	DO-E2
Columbia Research	P13,918	BXM28163 Subcontract 76	1	DO-A2
Lockheed Aircraft	52-144	NORD(f)1772	18	Polaris program
Sandia Corp.	51-4583	Prime contractor to AEC AT(29-1)789	2	DO-E2
U. S. Naval Ordnance	60530/4051 Y 5561-58		1	DO-A6
Westinghouse	73-A-138174	AT-11-1-GEN-14	1	DO-E1
North American Aviation	R853X-727100	AFO4(647)171	1	DX-A2
Sandia Corp.	15-1232	Prime contractor to AEC AT(29-1)789	1	

That no 114A amplifiers have been sold to civilians for civilian use and that all 114A amplifiers sold and delivered have been in connection with use on a specific United States Government prime contract.

/s/ RICHARD T. SILBERMAN,

/s/ THOMAS M. HAMILTON.

Subscribed and sworn to before me this 18th day of July, 1958.

[Seal] /s/GERALDINE F. DICKIE,
Notary Public in and for Said
County and State.

My commission expires November 25, 1961.

[Endorsed]: Filed July 21, 1958.

[Title of District Court and Cause.]

PLAINTIFF'S INTERROGATORIES TO DE-
FENDANT COHU ELECTRONICS, INC.

The plaintiff requests that the defendant, Cohu Electronics, Inc. (hereinafter referred to as "Cohu"), by an authorized officer thereof, answer under oath in accordance with Rule 33 of the Federal Rules of Civil Procedure the following interrogatories:

1. State the serial numbers of all Kintel Model 114A amplifiers sold by Cohu.
2. State the serial numbers of all model 114A amplifiers manufactured by Cohu.
3. State the names and addresses of all persons or companies to whom Kintel 114A amplifiers had been sold or delivered by Cohu [43] prior to August 31, 1958.

4. State the quantity and the serial numbers of all Kintel 114A amplifiers delivered or sold to each of the persons or companies named in your answer to the foregoing interrogatory.

5. State to the best of your knowledge the manner in which the Kintel 114A amplifiers sold to each person or company named in the answer to Interrogatory No. 3 are used by such person or company.

6. State whether or not any amplifiers having similar characteristics to Kintel Model 114A amplifiers have been manufactured or sold by Cohu which have not been designated as Model 114A amplifiers.

7. If the answer to Interrogatory No. 6 is in the affirmative, state the model number or other designation of each such amplifier, the present location of each such amplifier, and if sold, to whom sold.

8. State whether or not any Kintel Model 114A amplifiers have been manufactured or sold which do not bear serial numbers.

9. If the answer to Interrogatory No. 8 is in the affirmative, state the manner in which each such amplifier is designated, the present location of each such amplifier, and if sold, to whom sold.

10. State to the best of your knowledge whether

any Kintel 114A amplifier has been sold or delivered to the United States Government.

11. If the answer to Interrogatory No. 10 is in the affirmative, state the name and address of each company or person who sold or delivered such an amplifier to the government, and the quantity and serial numbers of the amplifiers sold or delivered to the government by each such company.

12. State the present location and the quantity and serial numbers of all Kintel 114A amplifiers, if any, which had not been delivered to purchasers thereof prior to August 31, 1958. [44]

13. State the names and addresses of all persons or companies from whom Cohu has received orders for Kintel 114A amplifiers prior to August 31, 1958, and state the quantity of such amplifiers each such person or company ordered, and the date of each such order.

14. State the date upon which Cohu acknowledged or accepted each order set forth in the answer to Interrogatory No. 13.

15. If any orders set forth in the answer to Interrogatory No. 13 had not been filled on August 31, 1958, state as to each unfilled order the name and address of the person or company who placed the order, to whom the amplifiers are to be delivered, and, to the best of your knowledge, by whom the amplifiers are to be used.

16. State the name and address of each person or company who ordered one or more Kintel 114A amplifiers pursuant to a government contract and state the identifying number of each such contract.

17. (a) As to each contract listed in the answer to Interrogatory No. 16, state the applications in which Kintel 114A amplifiers were to be used by the person or company who placed the order.

(b) As to each contract listed in the answer to Interrogatory No. 16, state whether Kintel 114A amplifiers are to be or have been incorporated as components of devices which are to be delivered or have been delivered to the government.

(c) As to each contract listed in the answer to Interrogatory No. 16, state whether Kintel 114A amplifiers are to be or have been incorporated in devices which are to be retained by the contractor named in each such contract.

18. As to each contract listed in the answer to Interrogatory No. 16, state whether each such contract contained an "authorization and consent" clause which you contend authorizes patent infringement by Cohu in the manufacture and sale of Kintel 114A amplifiers.

19. As to each contract listed in the answer to Interrogatory No. 16, set forth a copy of each such "authorization and consent" clause. [45]

20. As to each contract listed in the answer to Interrogatory No. 16, state whether or not the contract or any other document contains a patent indemnity clause under which you agree to indemnify either the purchaser or the government for patent infringement.

21. As to each contract listed in the answer to

Interrogatory No. 16, set forth a copy of each such patent indemnity clause.

Dated: August 27, 1958.

ROBERT H. FRASER,
RICHARD B. HOEGH,
/s/ By ROBERT H. FRASER. [46]

Acknowledgment of Service Attached. [47]

[Endorsed]: Filed August 28, 1958.

[Title of District Court and Cause.]

PLAINTIFF'S INTERROGATORIES TO DE-
FENDANT NEELY ENTERPRISES

The plaintiff requests that the defendant, Neely Enterprises, (hereinafter referred to as "Neely") by an authorized officer thereof, answer under oath in accordance with Rule 33 of the Federal Rules of Civil Procedure the following interrogatories:

1. State the serial number of all Kintel 114A amplifiers sold by Neely.
2. State the names and addresses of all persons or companies to whom Kintel 114A amplifiers had been sold or delivered by Neely prior to August 31, 1958.
3. State the quantity and the serial numbers of all Kintel [48] 114A amplifiers delivered or sold to each of the persons or companies named in the answer to the foregoing interrogatory.
4. State to the best of your knowledge the man-

ner in which the Kintel 114A amplifiers sold to each person or company named in the answer to Interrogatory No. 2 are used by such person or company.

5. State whether or not any amplifiers having similar characteristics to Kintel Model 114A amplifiers have been manufactured by Cohu Electronics, Inc. and sold by Neely which have not been designated as Model 114A amplifiers.

6. If the answer to Interrogatory No. 5 is in the affirmative, state the model number or other designation of each such amplifier, the present location of each such amplifier, and if sold, to whom sold.

7. State whether or not Neely has sold any Kintel Model 114A amplifiers which do not bear serial numbers.

8. If the answer to Interrogatory No. 7 is in the affirmative, state the manner in which each such amplifier is designated, the present location of each such amplifier, and if sold, to whom sold.

9. State to the best of your knowledge whether any Kintel 114A amplifier purchased through Neely has been sold or delivered to the United States Government.

10. If the answer to Interrogatory No. 9 is in the affirmative, state the name and address of each company or person who sold or delivered such an amplifier to the government, and the quantity and serial numbers of the amplifiers sold or delivered to the government by each such company.

11. State the present location and the quantity and serial numbers of all Kintel 114A amplifiers, if any, which had been ordered through Neely but had not

been delivered to the purchasers thereof prior to August 31, 1958.

12. State the names and addresses of all persons or companies [49] from whom Neely has received orders for Kintel 114A amplifiers prior to August 31, 1958, and state the quantity of such amplifiers each such person or company ordered and the date of each such order.

13. State the date upon which Neely acknowledged or accepted each order set forth in the answer to Interrogatory No. 12.

14. If any orders set forth in the answer to Interrogatory No. 12 had not been filled on August 31, 1958, state as to each unfilled order the name and address of the person or company who placed the order, to whom the amplifiers are to be delivered, and, to the best of your knowledge, by whom the amplifiers are to be used.

15. State the name and address of each person or company who ordered one or more Kintel 114A amplifiers through Neely pursuant to a government contract and state the identifying number of each such contract.

16. (a) As to each contract listed in the answer to Interrogatory No. 15, state the applications in which Kintel 114A amplifiers were to be used by the person or company who placed the order.

(b) As to each contract listed in the answer to Interrogatory No. 15, state whether Kintel 114A amplifiers are to be or have been incorporated as components of devices which are to be delivered or have been delivered to the government.

(c) As to each contract listed in the answer to Interrogatory No. 15, state whether Kintel 114A amplifiers are to be or have been incorporated in devices which are to be retained by the contractor named in each such contract.

17. As to each contract listed in the answer to Interrogatory No. 15, state whether each such contract contained an "authorization and consent" clause which you contend authorizes patent infringement in the sale of Kintel 114A amplifiers.

18. As to each contract listed in the answer to Interrogatory No. 15, set forth a copy of each such "authorization and consent" clause. [50]

19. As to each contract listed in the answer to Interrogatory No. 15, state whether or not the contract or any other document contains a patent indemnity clause under which Neely or Cohu Electronics, Inc. agrees to indemnify either the purchaser or the government for patent infringement.

20. As to each contract listed in the answer to Interrogatory No. 15, set forth a copy of each such patent indemnity clause.

Dated: August 27, 1958.

ROBERT H. FRASER,
RICHARD B. HOEGH,

/s/ By ROBERT H. FRASER. [51]

Acknowledgment of Service Attached. [52]

[Endorsed]: Filed August 28, 1958.

[Title of District Court and Cause.]

MEMORANDUM IN SUPPORT OF OBJEC-
TIONS TO PLAINTIFF'S INTERROGA-
TORIES BY DEFENDANT, COHU ELEC-
TRONICS, INC.

Plaintiff, on or about August 27, 1958, served on Defendant, Cohu Electronics, Inc., interrogatories numbered 1 through 21. Defendant, Cohu Electronics, Inc., objects to each and every interrogatory as premature, improper, and beyond the scope of Rule 26(b) or Rule 33 of the Federal Rules of Civil Procedure. In each interrogatory plaintiff is attempting to require defendant, Cohu Electronics, Inc., to provide information in the nature of a discovery as to damages, despite the fact that there has not yet been established that the patent, which is the basis of this suit, is valid and that its claims are infringed. Further, the plaintiff has not yet established a right to an accounting. [70]

The interrogatories are also premature in view of the fact that a Motion for Summary Judgment has been made by the Defendant, Cohu Electronics, Inc., which will be heard on September 15, 1958, by this Court. Should the Defendant, Cohu Electronics, Inc., prevail in this Motion, then the plaintiff will not be entitled to any damages and the responses to the interrogatories would be superfluous.

Interrogatories 1 and 2 respectively request the serial numbers of the Kintel model 114A amplifiers

(the alleged infringing device) sold and manufactured, and Interrogatories 3, 4, and 5 request the names and addresses of purchasers and quantities and serial numbers of the Kintel 114A amplifiers delivered and sold, and how used by the purchasers.

Interrogatories 6 and 7 request whether or not amplifiers having similar characteristics to the Kintel model 114A have been manufactured and sold and not so designated, and the manner and designation of such amplifiers.

Interrogatories 8 and 9 request information as to whether or not Kintel model 114A amplifiers have been sold which do not bear serial numbers and information as to their designation and location.

Interrogatories 10 and 11 request information as to whether or not the Kintel 114A amplifier has been sold to the United States Government and the data as to such sales.

Interrogatory 12 requests the location and other data concerning all Kintel 114A amplifiers not delivered to purchasers prior to August 31, 1958.

Interrogatories 13 through 15 are directed to obtaining data on orders received for Kintel 114A amplifiers prior to August 31, 1958. [71]

Interrogatories 16, 17(a), 17(b), 17(c), 18, 19, 20, and 21 seek information as to Kintel 114A amplifiers which were ordered pursuant to a Government contract.

Clearly, the information sought in all of these

interrogatories is solely for the purpose of discovery on the question of damages. In *Zenith Radio Corp. v. Dictograph Products Co., Inc.*, (D. Del., 1947) 10 F. R. Serv. 33.317, Case 1, 6 F.R.D. 597, the Court quoted with approval from *Moore Federal Practice*, Page 2640. * * * * * [72]

Respectfully submitted,

COHU ELECTRONICS, INC.,
Defendant,
By LYON & LYON,
/s/ CHARLES G. LYON,
Attorneys for Defendant. [73]

Affidavit of Service by Mail Attached. [74]

[Endorsed]: Filed September 5, 1958.

[Title of District Court and Cause.]

MEMORANDUM IN SUPPORT OF OBJEC-
TIONS TO PLAINTIFF'S INTERROGA-
TORIES BY DEFENDANT, NEELY EN-
TERPRISES

Plaintiff, on or about August 27, 1958, served on Defendant, Neely Enterprises, interrogatories numbered 1 through 20. Defendant, Neely Enterprises, objects to each and every interrogatory as premature, improper, and beyond the scope of Rule 26(b) or Rule 33 of the Federal Rules of Civil Procedure. In each interrogatory plaintiff is attempting to require Defendant, Neely Enterprises, to provide information in the nature of a discovery as to damages, despite the fact that there has not yet been

established that the patent, which is the basis of this suit, is valid and that its claims are infringed. Further, the plaintiff has not yet established a right to an accounting. [75]

The interrogatories are also premature in view of the fact that a Motion for Summary Judgment has been made by the Defendant, Neely Enterprises, which will be heard on September 15, 1958, by this Court. Should the Defendant, Neely Enterprises, prevail in this Motion, then the plaintiff will not be entitled to any damages and the responses to the interrogatories would be superfluous.

Interrogatories 1 and 2 respectively request the serial numbers of the Kintel model 114A amplifiers (the alleged infringing device) and to whom sold.

Interrogatories 3 and 4 respectively request the quantity and serial numbers of Kintel model 114A amplifiers and how used by the persons to whom sold.

Interrogatories 5 and 6 request whether or not amplifiers having similar characteristics to the Kintel model 114A have been manufactured and sold and not so designated, and the manner of designation of such amplifiers.

Interrogatories 7 and 8 request information as to whether or not Kintel model 114A amplifiers have been sold which do not bear serial numbers and information as to their designation and location.

Interrogatories 9 and 10 request information as to whether or not the Kintel 114A amplifiers have

been sold to the United States Government and the data as to such sales.

Interrogatory 11 requests the location and other data concerning all Kintel 114A amplifiers not delivered to purchasers prior to August 31, 1958.

Interrogatories 12, 13, and 14 are directed to obtaining data on orders received for Kintel 114A amplifiers prior to August 31, 1958.

Interrogatories 15, 16(a), 16(b), 16(c), 17, 18, 19, and 20 seek information as to Kintel 114A amplifiers which were ordered [76] pursuant to a Government contract.

Clearly, the information sought in all of these interrogatories is solely for the purpose of discovery on the question of damages. In *Zenith Radio Corp. v. Dictograph Products Co., Inc.*, (D. Del. 1947) 10 F. R. Serv. 33.317, Case 1, 6 F. R. D. 597, the Court quoted with approval from *Moore Federal Practice*, Page 2640, [77]

* * * * *

Respectfully submitted,

NEELY ENTERPRISES,

Defendant,

By LYON & LYON,

/s/ CHARLES G. LYON,

Attorneys for Defendant. [78]

Affidavit of Service by Mail Attached. [79]

[Endorsed]: Filed September 5, 1958.

[Title of District Court and Cause.]

AFFIDAVIT OF ELBRIDGE C. TITCOMB

State of California

County of San Diego—ss.

Elbridge C. Titcomb, of South Norwalk, Connecticut, being duly sworn deposes and says:

That he is employed by Cohu Electronics, Inc. as their Eastern sales representative;

That he is familiar with the 114A amplifier manufactured by Cohu Electronics, Inc.;

That he has sold 114A amplifiers to the following listed customers who purchased the 114A amplifiers under contracts from the United States Government as indicated by the contract numbers on the customer purchase order. [81]

Customer	Customer Purchase Order Number	Government Contract No.	Quantity	Rating
Edgerton GERMES-				
hausen and Grier	J-35108	AT(29-1)1183	6	DO-E2
Columbia Research	P13,918	BXM28163		
		Subcontract 76	1	DO-A2
Westinghouse	73-A-138174	AT-11-1-GEN-14	1	DO-E1

That he is cognizant of the apparatus wherein the 114A amplifiers purchased were used;

That this apparatus was assembled by each of the customers for and on behalf of the use of the United States Government;

That he has seen the specific apparatus at each of the customer locations wherein the 114A amplifiers were installed;

That this specific apparatus as well as the 114A

amplifiers therein were marked as being the property of the United States Government.

/s/ ELBRIDGE C. TITCOMB.

Subscribed and Sworn to before me this 22nd day of August, 1958.

[Seal] /s/ M. L. HORTON,
Notary Public in and for the County of San Diego,
State of California. My Commission Expires
October 22, 1961. [82]

Acknowledgment of Service Attached. [83]

[Endorsed]: Filed September 11, 1958.

[Title of District Court and Cause.]

AFFIDAVIT OF GERALD CAIN

State of California
County of Los Angeles—ss.

Gerald Cain, of 3939 Lankershim Boulevard, North Hollywood, California, being duly sworn deposes and says:

That he is employed by Defendant, Neely Enterprises, as Field Engineer, at their North Hollywood, California, office;

That he is familiar with the 114A amplifier made by the Defendant, Cohu Electronics, Inc.;

That he knows that one 114A amplifier was sold to North American Aviation, Inc., under the purchase order number R853X-727100 under United States Government contract number AF04(647)171, with a priority rating of DX-A2;

That he is cognizant of the apparatus wherein the 114A amplifier is used; [84]

That he has seen this specific apparatus and has seen that the 114A amplifier installed therein bears a tag indicating that it is the property of the United States Government.

/s/ GERALD CAIN.

Subscribed and Sworn to before me this 4th day of September, 1958.

[Seal] /s/ FERN L. DI JULIO,
Notary Public in and for said County and State. My
Commission Expires March 12, 1960. [85]

Acknowledgment of Service Attached. [86]

[Endorsed]: Filed September 11, 1958.

[Title of District Court and Cause.]

AFFIDAVIT OF EARL C. DAVIS

State of New Mexico
County of Bernalillo—ss.

Earl C. Davis, of 107 Washington Street, S.E., Albuquerque, New Mexico, being duly sworn deposes and says:

That he is employed by Defendant, Neely Enterprises, as Manager of their Albuquerque, New Mexico, office;

That he is familiar with the 114A amplifiers manufactured by Defendant, Cohu Electronics, Inc.;

That he knows that two 114A amplifiers were sold to the Sandia Corp. under purchase order number

51-4583 under Atomic Energy Commission contract AT(29-1)789 with a priority rating of DO-E2, and a third 114A amplifier was sold to the Sandia Corp. under purchase order number 15-1232 under Atomic Energy Commission contract AT(29-1)789; [87]

That he is cognizant of the apparatus wherein these three 114A amplifiers are used;

That he has seen this apparatus;

That he has seen that the three 114A amplifiers sold to the Sandia Corp. bear a tag indicating that they are the property of the Atomic Energy Commission, which is a department of the United States Government.

/s/ EARL C. DAVIS.

Subscribed and Sworn to before me this 4th day of September, 1958.

[Seal] /s/ ROSWELL MOORE,
Notary Public in and for said County and State.

My Commission Expires Sept. 26, 1959. [88]

Acknowledgment of Service Attached. [89]

[Endorsed]: Filed September 11, 1958.

[Title of District Court and Cause.]

AFFIDAVIT OF WILLIAM R. SAXON

State of Arizona

County of Maricopa—ss.

William R. Saxon, of 641 East Missouri Avenue, Phoenix, Arizona, being duly sworn deposes and says:

That he is employed by Defendant, Neely Enterprises, as Manager of their Phoenix, Arizona, office;

That he is familiar with the 114A amplifier manufactured by Defendant, Cohu Electronics, Inc.;

That he knows that one 114A amplifier was sold to the General Electric Company under a purchase order number 022-8757, which also specified that such purchase was made under United States Government contract number AFW33-038-AC-22193;

That he has seen the apparatus in which the 114A amplifier purchased by General Electric Company is incorporated;

That he has seen that this 114A amplifier is a part of a console which has a tag affixed thereto indicating that such console is the property of the United States Government.

/s/ WILLIAM R. SAXON.

Subscribed and Sworn to before me this 9th day of September, 1958.

[Seal] /s/ ANNE M. BORUP,

Notary Public in and for said County and State.

My Commission Expires July 1, 1961. [91]

Acknowledgment of Service Attached. [92]

[Endorsed]: Filed September 11, 1958.

[Title of District Court and Cause.]

AFFIDAVIT OF RICHARD T. SILBERMAN
AND THOMAS M. HAMILTON

State of California

County of San Diego—ss.

Richard T. Silberman and Thomas M. Hamilton, each being duly sworn, each for himself deposes and says:

That he is a Vice President of the Defendant, Cohu Electronics, Inc., and each has direct knowledge of the sales and deliveries of all 114A amplifiers manufactured and sold by Defendant;

That a 114A amplifier was sold directly to the United States Naval Ordnance Department under purchase order number 60530/4051 Y 5561-58 under a priority rating of DO-A6;

That the United States Naval Ordnance Department has accepted and paid for the amplifier which they have received; [93]

That accordingly this amplifier has been sold directly to and accepted by a department of the United States Government.

/s/ RICHARD T. SILBERMAN.

/s/ THOMAS M. HAMILTON.

Subscribed and Sworn to before me this 4th day of September, 1958.

[Seal] GERALDINE F. DICKIE,
Notary Public in and for said County and State.

My Commission Expires Nov. 25, 1961. [94]

Acknowledgment of Service Attached. [95]

[Endorsed]: Filed September 11, 1958.

[Title of District Court and Cause.]

AFFIDAVIT IN OPPOSITION TO DEFENDANTS' MOTION FOR SUMMARY JUDGMENT

State of California

County of Los Angeles—ss.

Robert H. Fraser, being first duly sworn, deposes and says that:

1. I am one of the attorneys for the plaintiff, Neff Instrument Corporation.

2. I have read the defendants' motion for summary judgment and the affidavit of Richard T. Silberman and Thomas M. Hamilton in [96] support thereof.

3. On August 26, 1958 and again on September 5, 1958, I visited the offices of The Ramo-Wooldridge Corporation at 5500 West El Segundo Boulevard, Hawthorne, California, and inquired of its employees as to whether or not any Kin Tel Model 114-A amplifiers, manufactured by Cohu Electronics, Inc., had been purchased by The Ramo-Wooldridge Corporation. In response to my inquiry there was made available to me for inspection and copying documents relating to the purchase by The Ramo-Wooldridge Corporation of five (5) Kin Tel Model 114-A amplifiers.

A copy of a first purchase order form made available to me is attached hereto as Exhibit "A". On its face, Exhibit "A" indicates that The Ramo-Wooldridge Corporation issued purchase order No. 24-

37216 to Kintel c/o Neely Enterprises, 3939 Lankershim Boulevard, North Hollywood, California, on January 29, 1958 for the purchase of one (1) amplifier, differential DC, Model 114A. Further, the purchase order of Exhibit "A" on its face does not contain any reference to a government contract number in the space provided therefor and indicates that the order was confirmed by Chas. Roberts on January 28, 1958.

A copy of a second purchase order form made available to me is attached hereto as Exhibit "B". Exhibit "B" indicates on its face that The Ramo-Wooldridge Corporation issued a purchase order No. 24-40862 to Kin Tel c/o Neely Enterprises, 3939 Lankershim Boulevard, North Hollywood, California, dated July 15, 1958, for the purchase of four (4) Kintel Model 114A amplifiers, one (1) 190 module, a 60 cycle chopper (for Kintel Model 114A) and one (1) 400 cycle chopper (for Kintel Model 114-A). The purchase order of Exhibit "B" omits any reference to a government contract in the space provided therefor and indicates on its face that it was [97] confirmed by C. Roberts on July 9, 1958.

Attached hereto as Exhibit "C" is a copy of a document made available to me bearing the heading Kin Tel and designated in the upper right-hand corner as a packing slip. Exhibit "C" on its face indicates that a Model 114A Differential Amplifier Serial No. 1018 and an Instruction Manual were shipped to The Ramo-Wooldridge Corporation in response to purchase order No. 24-37216.

Exhibit "D" attached hereto is a copy of a docu-

ment made available to me designated Purchase Order Change Notice which indicates on its face that an original unit of a Model 114A amplifier was to be returned to Kintel in exchange for an improved model.

Exhibit "E" attached hereto is a copy of a document made available to me designated as Receiving Report No. 24-37216 of The Ramo-Wooldridge Corporation. Exhibit "E" indicates on its face that a Model 114A Differential Amplifier was received by The Ramo-Wooldridge Corporation on May 25, 1958 and that an improved model was received by The Ramo-Wooldridge Corporation on August 22, 1958.

Exhibit "F" attached hereto is a copy of a document made available to me bearing the heading Kin Tel, directed to The Ramo-Wooldridge Corporation, identifying customer order No. 24-40862 and listing four (4) Model 114A differential DC amplifiers, a 190 module, a 60 cps chopper for 114A and a 400 cps chopper for 114A. On its face, Exhibit "F" indicates that Ramo-Wooldridge purchase order No. 24-40862 was confirmed by Kin Tel on July 24, 1958.

Attached hereto as Exhibit "G" is a copy of a document made available to me designated as a receiving report of The Ramo-Wooldridge Corporation, which on its face indicates that items numbered 3, 4 and 2 constituting a 190 module, a 60 cycle chopper for a Kintel Model 114-A and a 400 cycle chopper for a Kintel Model 114-A were received by The Ramo-Wooldridge Corporation on [98] August 11, 1958 and August 28, 1958.

From an inspection of The Ramo-Wooldridge Corporation's documents made available to me, I found no reference to any government contract number nor any statement indicating that amplifiers purchased by The Ramo-Wooldridge Corporation are in any way connected with government use.

4. On August 8, 1958, Mr. Glyn A. Neff and I visited the offices of the defendant Cohu Electronics, Inc., located at 5725 Kearney Villa Road, San Diego, California, for the purpose of inspecting exemplars of production model units of Kin Tel Model 114-A amplifiers. In the offices of Cohu Electronics, Inc. there was made available to us an amplifier labelled as Kin Tel Model 114-A. Mr. Samuel Lindenberg, of the law firm of Lyon & Lyon, counsel for defendants, stated that the amplifier was an engineering prototype model not intended for sale. In addition, there was made available to us in the offices of Cohu Electronics, Inc. a portion of a structure which had been dismantled and was inoperable, but which bore the designation Kin Tel Model 114-A amplifier and bore a plate on which there was printed Serial No. 1009.

5. On August 21, 1958 I visited the West Coast Electronics Manufacturers' Association trade show held at the Pan-Pacific Auditorium, Los Angeles, California, at which time I visited a display of electronics equipment manufactured by Cohu Electronics, Inc. of San Diego, California. There was on display at the trade show an amplifier labelled as a Kin Tel Model 114-A amplifier which was placed in operation and demonstrated by an attendant in

my presence. In addition, there was on display at the trade show an equipment rack containing six (6) amplifiers, each of which bore the designation Kin Tel Model 114-A differential DC amplifier. Small red indicator lights on each of the Model 114-A amplifiers on display [99] were illuminated indicating that the amplifiers were energized for operation. Adjacent the Model 114-A amplifiers on display was a stack of advertising brochures describing the characteristics of Kin Tel Model 114-A amplifiers. These advertising brochures were being generally distributed to the public in my presence and several were given to me. Attached hereto as Exhibit "H" is one such advertising brochure.

6. After inspecting the affidavit of Richard T. Silberman and Thomas M. Hamilton filed in support of defendants' motion for summary judgment, I prepared and forwarded letters inquiring as to the circumstances surrounding the sale of Kin Tel Model 114-A amplifiers to Edgerton Germeshausen & Grier, Lockheed Aircraft Corp. and Sandia Corp., all of whom are named as customers in the aforementioned affidavit. A copy of the letter to Edgerton Germeshausen & Grier is attached hereto as Exhibit "I", a copy of my letter to Lockheed Aircraft Corp. is attached hereto as Exhibit "J", and a copy of my letter to Sandia Corp. is attached hereto as Exhibit "K".

A reply letter was received by me from Mr. A. M. Clark, Vice-President and General Counsel of Edgerton Germeshausen & Grier stating that the government has not given its authorization and con-

sent to the infringement of patents in connection with government contract No. AT(29-1)-1183. Further, Mr. Clark's letter quotes a patent indemnity clause included in the purchase order under which Model 114-A amplifiers were purchased by Edgerton Germeshausen & Grier under which the vendor agrees to indemnify the purchaser and the United States government for the infringement of any letters patent. A copy of Mr. Clark's letter is attached hereto as Exhibit "L".

A reply letter dated August 29, 1958 was received by me from Mr. E. L. Nichols, Division Counsel of Lockheed Aircraft Corp. in [100] which Mr. Nichols stated that he did not feel at liberty to disclose the requested information. A copy of the letter from Mr. Nichols is attached hereto as Exhibit "M".

A reply letter was received by me from Mr. Kimball Prince of the Sandia Corp. dated August 26, 1958 in which he stated that Kin Tel Model 114-A amplifiers were purchased by Sandia pursuant to three separate purchase orders, on one of which purchase orders two (2) Kin Tel Model 114-A amplifiers were purchased making a total of four (4) Kin Tel Model 114-A amplifiers purchased by Sandia Corp. Mr. Prince further stated that the prime contract with the United States Atomic Energy Commission does not contain a specific authorization and consent clause. Further, Mr. Prince enclosed a copy of the Sandia purchase order form of which paragraph 8 constitutes a patent indem-

nity clause under which the seller agrees to indemnify the buyer and the government for infringement of any United States letters patent. A copy of Mr. Prince's letter and the Sandia Corp. purchase order form are attached hereto as Exhibit "N".

7. On August 27, 1958 Interrogatories were filed directed to the defendant Neely Enterprises and the defendant Cohu Electronics, Inc. directed to the discovery of facts relating to the manufacture, sale and use of Model 114-A amplifiers or amplifiers having similar characteristics from which the plaintiff might secure further information concerning the truth of the statements made in the aforementioned affidavit of Richard Silberman and Thomas Hamilton. Defendants have filed objections to plaintiff's interrogatories. No answer to any of the interrogatories has been received by plaintiff's attorneys either from defendants or their counsel.

/s/ ROBERT H. FRASER.

Sworn to and subscribed before me this 11th day of September, 1958.

[Seal] /s/ EMMA C. ARMSTRONG,

Notary Public. My Commission Expires November 12, 1961. [101]

Acknowledgment of Service Attached.

EXHIBIT "I"

[Letterhead of Robert H. Fraser]

August 13, 1958

Government Contracting Officer
Edgerton Germeshausen & Grier
160 Brookline Avenue
Boston, Massachusetts

Dear Sir:

As you may be aware, on May 12, 1958 the Neff Instrument Corporation instituted legal proceedings against Cohu Electronics, Inc. and Neely Enterprises for infringement of U. S. Patent No. 2,832,848. A particular device manufactured by the defendants which is alleged to infringe is the Kintel Model 114A amplifier.

Although the Neff Instrument Corporation regards the controversy as a private civil matter, involving the defendants only, the defendants have raised as a defense to the action the issue of government liability under Section 1498, Title 28 of the United States Code. In an affidavit filed by Richard T. Silberman and Thomas M. Hamilton of Cohu Electronics, Inc., it is stated that six Model 114A amplifiers have been delivered to Edgerton under your Purchase Order No. J-35108, government contract No. AT(29-1)1183. In order that we may resolve the issue as to whether or not liability properly rests with the defendants to this action or with the government, we would appreciate having certain information relating to the circumstances under which the amplifiers were purchased by Edger-

ton and are being used. Accordingly, will you please write us at your earliest convenience setting forth the following information:

1. Have any Kintel Model 114A amplifiers been purchased by Edgerton other than the ones identified above?

2. Are any of the Kintel Model 114A amplifiers purchased by Edgerton ultimately delivered to the government either separately or as a part of a larger assembly?

3. For what purpose are Kintel Model 114A amplifiers being used by Edgerton?

4. To what extent has the government given its authorization and consent to the infringement of patents in connection with government contract No. AT(29-1)1183?

If it is at all possible we would like to receive a copy of both the purchase order under which the amplifiers were purchased and the government contract. We will be glad to reimburse you for any charges involved in making copies.

We thank you for your cooperation in this matter and regret that it is necessary to trouble you in connection with what we believe to be a strictly private controversy.

Yours very truly,

Robert H. Fraser.

RHF:cca

cc: Neff Instrument Corp.

bcc: Richard B. Hoegh [110]

EXHIBIT "J"

[Letterhead of Robert H. Fraser]

August 13, 1958

Government Contracting Officer
Lockheed Aircraft Corp.
Sunnyvale, California

Dear Sir:

As you may be aware, on May 12, 1958 the Neff Instrument Corporation instituted legal proceedings against Cohu Electronics, Inc. and Neely Enterprises for infringement of U. S. Patent No. 2,832,848. A particular device manufactured by the defendants which is alleged to infringe is the Kintel Model 114A amplifier.

Although the Neff Instrument Corporation regards the controversy as a private civil matter involving the defendants only, the defendants have raised as a defense to the action the issue of government liability under Section 1498, Title 28 of the United States Code. In an affidavit filed by Richard T. Silberman and Thomas M. Hamilton of Cohu Electronics, Inc., it is stated that 18 Model 114A amplifiers have been delivered to Lockheed under your purchase order No. 52-144, government contract No. NORD(f)1772. In order that we may resolve the issue as to whether or not liability properly rests with the defendants to this action or with the government, we would appreciate having certain information relating to the circumstances under which the amplifiers were purchased by Lockheed and are being used. Accordingly, will you

please write us at your earliest convenience setting forth the following information:

1. Have any Kintel Model 114A amplifiers been purchased by Lockheed other than the ones identified above?

2. Are any of the Kintel Model 114A amplifiers purchased by Lockheed ultimately delivered to the government either separately or as a part of a larger assembly?

3. For what purpose are Kintel Model 114A amplifiers being used by Lockheed?

4. To what extent has the government given its authorization and consent to the infringement of patents in connection with government contract No. *NORD(f)1772*?

If it is at all possible we would like to receive a copy of both the purchase order under which the amplifiers were purchased and the government contract. We will be glad to reimburse you for any charges involved in making copies.

We thank you for your cooperation in this matter and regret that it is necessary to trouble you in connection with what we believe to be a strictly private controversy.

Yours very truly,

Robert H. Fraser.

RHF:eca

cc: Neff Instrument Corporation

bcc: Richard B. Hoegh [111]

EXHIBIT "K"

[Letterhead of Robert H. Fraser]

August 13, 1958

Government Contracting Officer
Sandia Corp.
e/o White Sands Proving Grounds
Albuquerque, New Mexico

Dear Sir:

As you may be aware, on May 12, 1958 the Neff Instrument Corporation instituted legal proceedings against Cohu Electronics, Inc. and Neely Enterprises for infringement of U. S. Patent No. 2,832,848. A particular device manufactured by the defendants which is alleged to infringe is the Kintel Model 114A amplifier.

Although the Neff Instrument Corporation regards the controversy as a private civil matter involving the defendants only, the defendants have raised as a defense to the action the issue of government liability under Section 1498, Title 28 of the United States Code. In an affidavit filed by Richard T. Silberman and Thomas M. Hamilton of Cohu Electronics, Inc., it is stated that three Model 114A amplifiers have been delivered to Sandia Corp., one under your Purchase Order No. 15-1232 and two under your Purchase Order No. 51-4583, government contract No. AT(29-1)789. In order that we may resolve the issue as to whether or not liability properly rests with the defendants to this action or with the government, we would appreciate having certain information relating to the circum-

stances under which the amplifiers were purchased by Sandia Corp. and are being used. Accordingly, will you please write us at your earliest convenience setting forth the following information:

1. Have any Kintel Model 114A amplifiers been purchased by Sandia Corp. other than the ones identified above?

2. Are any of the Kintel Model 114A amplifiers purchased by Sandia Corp. ultimately delivered to the government separately or as a part of a larger assembly?

3. For what purpose are Kintel Model 114A amplifiers being used by Sandia Corp.?

4. To what extent has the government given its authorization and consent to the infringement of patents in connection with government contract No. AT(29-1)789?

If it is at all possible, we would like to receive a copy of both the purchase orders under which the amplifiers were purchased, and the government contract. We will be glad to reimburse you for any charges involved in making copies.

We thank you for your cooperation in this matter and regret that it is necessary to trouble you in connection with what we believe to be a strictly private controversy.

Yours very truly,

Robert H. Fraser.

RHF:eca

cc: Neff Instrument Corporation

bcc: Richard B. Hoegh [112]

EXHIBIT "L"

[Letterhead of Edgerton, Germeshausen & Grier,
Inc.]

19 August 1958

Robert H. Fraser, Esq.
641 Title Insurance Building
433 South Spring Street
Los Angeles 13, California

Dear Sir:

This is in reply to your letter of August 13, 1958 in which you advise of the pending action of Neff Instrument Corporation against Cohu Electronics, Inc. and Neely Enterprises for infringement of U. S. Patent No. 2,832,848.

Our answers to the questions set forth in your letter are as follows:

1. According to our records, no Kintel Model 114A amplifiers have been purchased by Edgerton, Germeshausen & Grier, Inc. other than the ones covered by our Purchase Order No. J-35108. With respect to the amplifiers purchased under that Purchase Order, only 5 were accepted after late delivery, following which delivery on the sixth was cancelled for failure to deliver on time.

2. The 5 Kintel Model 114A amplifiers purchased by us were delivered to the Government separately.

3. The purpose intended for the 5 Kintel Model 114A amplifiers was their use as pre-amplifiers in selected channels for driving low impedance loads.

4. The Government has not given its authorization and consent to the infringement of patents in connection with Government Contract No. AT (29-1)-1183. On the contrary, Clause 18 of Edgerton, Germeshausen & Grier, Inc. Purchase Order—General Conditions appearing on the back of Purchase Order J-35108 was inserted in the Purchase Order—General Conditions in order to fulfill contractual requirements. Clause 18 reads as follows:

“Patent Indemnity: The Vendor agrees to indemnify the Purchaser and the United States Government, their officers, servants, and employees against liability of any kind (including costs and expenses incurred) for the use of any invention or discovery and for the infringement of any Letters Patent (not including liability arising pursuant to Patent) occurring in the performance of this Order or arising by reason of the use or disposal by or for the account of the Purchaser of the United States Government of items manufactured or supplied under this Order.”

We do not believe it is possible to furnish you with a copy of the Purchase Order under which the amplifiers were purchased and a copy of the Government contract. It is our opinion that the Government has a proprietary interest in these documents and, therefore, the right to control dissemination of the same.

We trust that the foregoing information is satisfactory to you.

Very truly yours,

EDGERTON, GERMESHAUSEN
& GRIER, INC.,

/s/ A. M. Clark,

A. M. Clark, Vice-President and
General Counsel.

AMC:jpm [113]

EXHIBIT "M"

[Letterhead of Lockheed Aircraft Corporation]

Robert H. Fraser, Esq.

August 29, 1958

641 Title Insurance Building

433 South Spring Street

Los Angeles 13, California

Dear Mr. Fraser:

Your letter dated August 13, 1958 addressed to "Government Contracting Officer, Lockheed Aircraft Corp., Sunnyvale, California" has been referred to me by the Naval Inspector of Ordnance.

Inasmuch as the information requested by you involves the business relationship between us and our vendor, we do not feel at liberty to disclose such information.

Very truly yours,

/s/ E. L. Nichols (efs),

E. L. Nichols,

Division Counsel.

ELN:efs [114]

EXHIBIT "N"

[Letterhead of Sandia Corporation]

Mr. Robert H. Fraser

August 26, 1958

Attorney at Law

641 Title Insurance Building

433 South Spring Street

Los Angeles 13, California

Dear Mr. Fraser:

Your letter of August 13 addressed to Government Contracting Officer, Sandia Corp., c/o White Sands Proving Grounds, Albuquerque, New Mexico has been referred to me for reply.

Sandia Corporation operates the Sandia Laboratory at Sandia Base, Albuquerque, New Mexico on a non-profit basis for the Atomic Energy Commission. Under the provisions of all our purchase orders, title to articles purchased passes directly from the seller to the United States Government at the point of delivery. The AEC is our sole customer and consequently anything manufactured for us or purchased by us goes directly to the United States Government. Any items which are retained by us for use in our work nevertheless become property of the United States Government in accordance with the purchase order terms above noted.

To answer your specific questions:

1. The following purchases of Kintel Model 114A amplifiers have been made by Sandia Corporation from Kintel, Inc.:

P. O. 15-1232 dated 4/4/58 1 Kintel 114A

P. O. 51-4583 dated 4/7/58 2 Kintel 114A

P. O. 15-2810 dated 6/2/58 1 Kintel 114A

2 and 3. The amplifiers are used for test pur-

poses at Sandia Laboratory and as above noted, title to those items has passed to the United States Government.

4. Our prime contract with the U. S. Atomic Energy Commission does not contain a specific authorization and consent clause. However, the entire operation of the Sandia Laboratory is conducted on the basis of the tasks assigned to it by the AEC and therefore all activities of the Laboratory are for the benefit of and at the expense of the AEC.

Unless it is vital I should prefer not to furnish a copy of our prime contract. While it is not classified, we do not like to furnish it to outside parties. I can, however, advise you that it does not contain any provisions relative to the question of authorization and consent. It does specifically provide that Sandia Corporation shall engage in no activities except as provided in the contract with the AEC.

I am enclosing a copy of our purchase order form on which the above three orders were issued. The orders themselves contained no other additional information other than shipping directions.

In accordance with our undertaking with the AEC and our obligations to our suppliers we have advised both the Commission and Kintel, Inc., that a claim has been made by your client with respect to alleged infringement relating to the instrument in question.

Very truly yours,

/s Kimball Prince,
Kimball Prince.

KP/mb

Encl.

[Title of District Court and Cause.]

AFFIDAVIT OF GLYN A. NEFF IN OPPOSITION TO DEFENDANTS' MOTION FOR SUMMARY JUDGMENT

State of California
County of Los Angeles—ss.

Glyn A. Neff, being first duly sworn, deposes and says that:

1. I am the President of the Plaintiff, Neff Instrument Corporation.

2. On August 8, 1958 Mr. Robert H. Fraser and I visited the offices of the defendant Cohu Electronics, Inc., located at 5725 Kearney Villa Road, San Diego, California, for the purpose of [117] inspecting exemplars of production model units of Kin Tel Model 114-A amplifiers. In the offices of Cohu Electronics, Inc. I inspected and operated a Kin Tel Model 114-A amplifier stated by Mr. Samuel Lindenberg to be an engineering prototype model not intended for sale. Also, I inspected a portion of a structure which had been dismantled and was inoperable, but which bore the designation Kin Tel Model 114-A amplifier and a plate having Serial Number 1009 written thereon.

3. On August 21, 1958 I visited the West Coast Electronics Manufacturers' Association trade show held at the Pan-Pacific Auditorium in Los Angeles, California, at which time I visited a display of various electronics equipment manufactured by Cohu

Electronics, Inc. of San Diego, California. There was on display at the trade show an amplifier designated a Kin Tel Model 114-A amplifier which was housed in an individual cabinet. In addition, there was on display an equipment rack containing six (6) amplifiers, each of which was labeled Kin Tel Model 114-A differential DC amplifier. A neon indicator light on each of the Model 114-A amplifiers on display was illuminated indicating that the amplifiers were energized for operation.

4. Over the past few months I have personally inspected issues of trade journals distributed generally to the public. In the course of my inspection, I found advertisements of the defendant Cohu Electronics, Inc. offering for sale to the public Kin Tel Model 114-A amplifiers. Copies of four such advertisements are attached hereto as Exhibits "A", "B", "C" and "D". The advertisement of Exhibit "A" was published in issues of "Electronics" magazine dated March 14, 1958 and April 11, 1958; the advertisement of Exhibit "B" was published in the "Electronics Buyer's Guide Issue" dated June, 1958; the advertisement of Exhibit "C" was published in [118] an issue of "Electronics" magazine dated July 18, 1958; and the advertisement of Exhibit "D" was published in issues of "Electronics" magazine dated May 23, 1958 and June 6, 1958, in an issue of "Western Electronic News" dated August, 1958 and in an issue of the "Grid-Bulletin of the Los Angeles and San Francisco Institute of Radio Engineers" dated July, 1958.

/s/ GLYN A. NEFF.

Sworn to and subscribed before me this 11th day
of September, 1958.

[Seal] /s/ EMMA C. ARMSTRONG,
Notary Public. My Commission Expires November
21, 1961. [119]

Acknowledgment of Service Attached. [124]

[Title of District Court and Cause.]

AFFIDAVIT OF BRUCE C. GODWIN

State of California,
County of Santa Clara—ss.

Bruce C. Godwin, of 3065 Maurecia Avenue, Santa Clara, California, being duly sworn deposes and says:

That he is employed as a purchasing agent by the Missile Systems Division of Lockheed Aircraft Corporation, Sunnyvale, California;

That he is familiar with the amplifier devices designated as Model 114-A manufactured by defendant Cohu Electronics, Inc.;

That to his personal knowledge eighteen (18) of said amplifiers have been purchased by the Missile Systems Division of Lockheed Aircraft Corporation by Purchase Order Number 52-144; [140]

That said purchase order was issued pursuant to contract NOrd(F)-1772 between Lockheed Aircraft Corporation and the United States Government;

That said contract NOrd(F)-1772 contains the following provision with respect to title to facilities:

“Title to all of the facilities shall be and remain in the Government, it being understood and agreed that the title to all materials, parts, assemblies, sub-assemblies, supplies, equipment and other property for the cost of which the Contractor is (or, but for express agreement, if any, set forth in the Schedule, limiting reimbursement for work hereunder to a fixed maximum, would be) entitled to be reimbursed under this contract, shall automatically pass to and

vest in the Government upon delivery to the Contractor or upon the happening of any other event by which title passes from the vendor or supplier thereof, in the case of any such property which is purchased for the performance of this contract, or, in the case of property not so purchased, upon the allocation thereof to this contract by the commencement of processing or use thereof or otherwise. The provisions of this Article, however, shall not be construed as relieving the Contractor from responsibility for the care and preservation of such facilities or as a waiver of the right of the Government to require the fulfillment of any of the terms of this contract.”;

That Lockheed Aircraft Corporation is the party referred to as “Contractor” in the above-quoted provision and that Lockheed Aircraft Corporation is entitled to be reimbursed under contract NOrd(F)-1772 for said amplifiers;

That pursuant to the above-quoted provisions, title to said amplifiers is in the United States Government.

/s/ BRUCE C. GODWIN.

Subscribed and Sworn to before me this 11th day of September, 1958.

[Seal] MARIAN LOCKWOOD,

Notary Public in and for said County and State.

My Commission Expires: April 16, 1962. [141]

Acknowledgment of Service Attached. [142]

[Endorsed]: Filed September 12, 1958.

[Title of District Court and Cause.]

SUPPLEMENTAL AFFIDAVIT
OF ROBERT H. FRASER

State of California,
County of Los Angeles—ss.

Robert H. Fraser, being first duly sworn, deposes and says that:

1. I am one of the attorneys for the plaintiff, Neff Instrument Corporation.

2. On September 11, 1958, I executed an affidavit attesting to certain facts in connection with the activities of Cohu Electronics, Inc. and Neely Enterprises in manufacturing, using and selling Kintel Model 114-A amplifiers.

3. I have read the affidavit of Thomas M. Hamilton [144] dated September 15, 1958, in which Mr. Hamilton states that the Ramo-Wooldridge Corporation has attempted to purchase four other Model 114-A differential amplifiers and has attempted to secure another in place of Serial No. 1018 but these orders have not been accepted or fulfilled.

4. On September 17, 1958 I visited the offices of the Ramo-Wooldridge Corporation at 5500 West El Segundo Boulevard, Hawthorne, California, and inquired of its employees as to the truth of the matters asserted in Mr. Hamilton's affidavit of September 15, 1958.

In response to my inquiry, there was made available to me for inspection a Kintel Model 114-A am-

plifier in the possession of the Ramo-Wooldridge Corporation, bearing Serial No. 1001, housed in a cabinet to which there was affixed a Ramo-Wooldridge property tag No. 24-3257. In addition, there was attached to the Kintel Model 114-A amplifier in the possession of Ramo-Wooldridge Corporation an inspection certificate.

A copy of each side of said inspection certificate is attached hereto as Exhibit "O". On its face, the inspection certificate indicates that a division of Cohu Electronics, Inc., located at 5725 Kearny Villa Rd., San Diego 11, California tested and accepted the Kintel Model 114-A amplifier, Serial No. 1001, now in the possession of the Ramo-Wooldridge Corporation. The inspection certificate bears the signature of E. Cooper and the date May 12, 1958, along with the initials M.J.K. and a circular inspection stamp.

Attached hereto as Exhibit "P" is a document made available to me by an employee of the Ramo-Wooldridge Corporation comprising a shipping request of the Ramo-Wooldridge Corporation which indicates on its face that a Model 114-A amplifier, [145] Serial No. 1018 was to be exchanged for a later model. Exhibit "P" indicates on its face that the original Model 114-A amplifier, Serial No. 1018, was in the possession of Bob Reed.

Exhibit "Q" is a copy of a document made available to me labeled "Material Special Handling," signed by R. Reed, indicating that the Ramo-Wooldridge Corporation received an improved Kintel Model 114-A amplifier on August 21, 1958.

The information given to me on September 17, 1958 confirmed the undenied facts shown in Exhibit "E" of my previous affidavit which constitutes a copy of a receiving report of Ramo-Wooldridge Corporation. Exhibit "E" indicates that an improved Model 114-A amplifier was delivered to Kintel on August 22, 1958.

/s/ ROBERT H. FRASER.

Sworn to and subscribed before me this 19th day of September, 1958.

[Seal] /s/ WINIFRED A. DAVIE,
Notary Public. My Commission Expires March 7,
1959. [146]

Affidavit of Service by Mail Attached. [150]

[Title of District Court and Cause.]

AFFIDAVIT OF THOMAS M. HAMILTON

State of California,
County of Los Angeles—ss.

Thomas M. Hamilton, being first duly sworn, deposes and says that he is the same Thomas M. Hamilton who has heretofore filed an affidavit in this case dated July 18, 1958, and that he is a Vice President of the defendant, Cohu Electronics, Inc.; that Cohu Electronics, Inc., on May 22, 1958, shipped to Ramo-Wooldridge Corporation one 114A differential amplifier Serial No. 1018; that when said amplifier Serial No. 1018 was shipped to Ramo-Wooldridge Corporation, it was understood by affiant and by the other personnel of Cohu Electronics, Inc., that said amplifier was furnished to Ramo-Wooldridge Corporation on behalf and for the benefit of an agency of the United States Government; that later Cohu Electronics, Inc. became aware of the fact that [152] Ramo-Wooldridge Corporation had no intention of delivering said amplifier Serial No. 1018 to the United States Government and accordingly on August 14, 1958, said amplifier Serial No. 1018 was returned to Cohu Electronics, Inc.;

That Ramo-Wooldridge Corporation has attempted to purchase four other Model 114A differential amplifiers and has attempted to secure another in place of Serial No. 1018, but these orders have not been accepted by Kintel and have not been fulfilled for the reason that Ramo-Wooldridge Cor-

poration has been unable or unwilling to supply a prime government contract number to which these amplifiers can be assigned, and accordingly the receipt of such order and the shipping of such amplifiers would be contrary to the instructions which Cohu Electronics, Inc. has given one and all to the effect that no 114A amplifiers are available except for the benefit of the United States Government;

That the papers attached to the affidavit of Robert H. Fraser reflected the foregoing, and particularly Exhibit F to said affidavit which invoices certain materials to Ramo-Wooldridge Corporation and is in Ramo-Wooldridge Corporation's possession because the materials other than the four 114A differential D.C. amplifiers were actually shipped, particularly those items whose listing is surrounded in ink on said Exhibit F.

/s/ THOMAS M. HAMILTON.

Subscribed and Sworn to before me this 15th day of September, 1958.

[Seal] /s/ BARBARA A. FERNOW,

Notary Public in and for said County and State.

My Commission Expires April 7, 1962. [153]

Affidavit of Service by Mail Attached. [154]

[Endorsed]: Filed September 15, 1958.

[Title of District Court and Cause.]

OBJECTIONS TO FINDINGS OF FACT AND
CONCLUSIONS OF LAW [155]

* * * * *

4. Add the following to paragraph XI:

That said order was confirmed on August 9, 1958. That none of the 114-A amplifiers sold pursuant to the foregoing order and confirmation were manufactured and sold pursuant to a Government contract. [157]

* * * * *

Respectfully submitted,

ROBERT H. FRASER,
RICHARD B. HOEGH,
/s/ By RICHARD B. HOEGH,
Attorneys for Plaintiff. [159]

Affidavit of Service by Mail Attached. [160]

[Endorsed]: Filed October 2, 1958.

In the United States District Court, Southern
District of California, Central Division

Civil Action No. 438-58 Y

NEFF INSTRUMENT CORPORATION,

Plaintiff,

vs.

COHU ELECTRONICS, INC. and NEELY EN-
TERPRISES, Defendants.

FINDINGS OF FACT, CONCLUSIONS OF
LAW AND SUMMARY JUDGMENT

This cause coming on to be heard upon defend-
ants' motion for summary judgment and the Court
being fully advised enters the following findings of
fact, conclusions of law and summary judgment:

Findings of Fact

I.

That as to each of the facts hereinafter speci-
fically found, there is no genuine issue.

II.

That this cause is a patent infringement case
alleging infringement by defendants of Letters Pat-
ent of the United States No. 2,832,848 for Electrical
Signal Amplifiers.

III.

That plaintiff, Neff Instrument Corporation, is a
[163] corporation of the State of California and
has its principal place of business at 2211 East Foot-
hill Boulevard, Pasadena, California.

IV.

That defendant, Cohu Electronics, Inc., is a corporation of the State of Delaware and has its principal place of business at 5725 Kearney Villa Road, San Diego, California, and a place of business at 14743 Lull Street, Van Nuys, California.

V.

That defendant, Neely Enterprises, is a corporation of the State of California and has its principal place of business at 3939 Lankershim Boulevard, Los Angeles, California.

VI.

That the accused device in this case is identified as Cohu Electronics' Amplifier Model 114A.

VII.

That all 114A Cohu Electronics' amplifiers manufactured and sold to date, except in one instance, have been manufactured and sold under specific prime United States Government Contracts.

VIII.

That the United States Government has taken title to all the 114A Cohu Electronics' amplifiers which were sold under the United States Government Contracts.

IX.

That the one instance wherein a 114A Cohu Electronics' amplifier was not manufactured and sold under a separate specific prime United States Government Contract was a sale of a single one of said

amplifiers to the Ramo Wooldridge Corporation, of 5500 El Segundo Boulevard, Los Angeles 46, California, pursuant to their purchase order which was placed and confirmed prior to the issuance (on April 29, 1958) of plaintiff's United States Letters Patent No. 2,832,848. [164]

X.

That the said single one of said amplifiers was returned by The Ramo Wooldridge Corporation to the defendants and a later model 114A amplifier was provided on August 21, 1958.

XI.

That an order for four more of said 114A Cohu Electronics' amplifiers, as well as other items, was placed with the defendants by The Ramo Wooldridge Corporation on or about July 15, 1958.

XII.

That on August 28, 1958, a delivery was made to The Ramo Wooldridge Corporation of only such other items, and no delivery has ever been made of the said four more 114A Cohu Electronics' amplifiers.

XIII.

That advertisements and advertising displays of 114A amplifiers made by the defendants do not constitute offers for sale of these amplifiers to the general public.

Conclusions of Law

I.

That the manufacture and sale by defendants of

the accused devices herein have been manufactures and sales for the United States Government with the authorization and consent of the Government within the meaning of Title 28 U.S.C. Section 1498.

II.

That plaintiff's sole remedy under the premises is by action against the United States in the Court of Claims for recovery of its reasonable and entire compensation for such use and compensation.

III.

That the incidents recited in the Findings of Fact IX, X, XI, and XII are insufficient to remove this action from under [165] the operation of Title 28 U.S.C. Section 1498 and to vest jurisdiction in this court.

Judgment

In accordance with the foregoing Findings of Fact and Conclusions of Law, it is hereby Ordered, Adjudged and Decreed:

1. That the complaint herein be dismissed and that the plaintiff take nothing thereby.
2. That defendants recover their costs and disbursements herein.

Dated this 3rd day of October, 1958.

/s/ LEON R. YANKWICH,
United States District Judge.

[Endorsed]: Filed and Entered October 3, 1958.

[Title of District Court and Cause.]

NOTICE OF APPEAL

Notice is hereby given that Neff Instrument Corporation, plaintiff above named, hereby appeals to the United States Court of Appeals for the Ninth Circuit from the final judgment entered in this action on the 3rd day of October, 1958.

Dated: October 17, 1958.

Respectfully submitted,

ROBERT H. FRASER,
RICHARD B. HOEGH,
/s/ By RICHARD B. HOEGH,
Attorneys for Plaintiff. [168]

[Endorsed]: Filed October 23, 1958.

[Title of District Court and Cause.]

CERTIFICATE BY CLERK

I, John A. Childress, Clerk of the above-entitled Court, hereby certify that the items listed below constitute the transcript of record on appeal to the United States Court of Appeals for the Ninth Circuit, in the above-entitled matter:

A. The foregoing pages numbered 1 to 170, inclusive, containing the original:

Complaint.

Notice of Motion and Motion for discovery, etc.

Answer.

Notice of Motion and Motion for Summary Judgment.

Minute Order 7/21/58.

Plaintiff's Interrogatories to Defendant Cohu Electronics.

Plaintiff's Interrogatories to Defendant Neely Enterprises.

Notice of hearing of objections to Plaintiff's Interrogatories by defendant Cohu Electronics.

Notice of hearing of objections to Plaintiff's Interrogatories by defendant Neely Enterprises.

Memorandum in support of objections to Plaintiff's Interrogatories by defendant Neely Enterprises.

Memorandum in support of objections to Plaintiff's Interrogatories by defendant Cohu Electronics.

Minute Order 9/8/58.

Affidavit of Elbridge C. Titcomb.

Affidavit of Gerald Cain.

Affidavit of Earl C. Davis.

Affidavit of Wm. R. Saxon.

Affidavit of Richard T. Silberman and Thos. M. Hamilton.

Affidavit in opposition to Defendants' Motion for Summary Judgment.

Affidavit of Glyn A. Neff in opposition to Defendant's Motion for Summary Judgment.

Points and Authorities in opposition to motion for Summary Judgment.

Plaintiff's response to objections to Interrogatories.

Statement of Genuine Issues of Fact.

Affidavit of Bruce C. Godwin.

Minute Order 9/15/58.

Supplemental Affidavit of Robert H. Fraser.

Minute Order 9/22/58.

Affidavit of Thomas M. Hamilton.

Objections to Findings of Fact and Conclusions
of Law.

Minute Order 10/3/58.

Clerk's notice of entry of Findings of Fact, etc.

Findings of Fact, Conclusions of Law and Judg-
ment.

Notice of Appeal.

Designation of Record on Appeal.

B. Two volumes of Reporter's Official Transcript
of proceedings had on:

July 21, 1958 and September 22, 1958.

I further certify that my fee for preparing the
foregoing record, amounting to \$2.40, has been paid
by appellant.

Dated: November 17, 1958.

[Seal] JOHN A. CHILDRESS,
 Clerk,

/s/ By WM. A. WHITE,
 Deputy Clerk.

In The United States District Court, Southern
District of California, Central Division

No. 438-58-Y Civil

NEFF INSTRUMENT CORPORATION, a Cali-
fornia corporation, Plaintiff,

vs.

COHU ELECTRONICS, INC., a Delaware cor-
poration and NEELY ENTERPRISES, a Cal-
ifornia corporation, Defendants.

REPORTER'S TRANSCRIPT OF
PROCEEDINGS

Los Angeles, California

Monday, September 22, 1958

Honorable Leon R. Yankwich, Judge Presiding.

* * * * * [1]*

Mr. Lyon: Now, nothing is subject to the Re-
negotiation Act unless it is a deal with the United
States Government. But, be that as it may, that
sales of that one No. 1018—that Serial No. 1018
amplifier to Ramo-Woolridge was in January of
1958.

The patent issued January 29th, so that sale
could not constitute a basis for holding that these
defendants did not come under Section 1498 of

* Page numbers appearing at top of page of Reporter's Tran-
script of Record.

Title 28. A sale prior to the issuance of the patent, of course, is not subject to that.

I don't want to mislead the court. The paper work on that sale is dated January 30, 1958.

The Court: The purchase order is dated January 29th, Mr. Lyon.

Mr. Lyon: All right, sir. The acceptance on Exhibit C is dated January 30th. Unfortunately, we did not get around to delivering it until--when was it--some time in May, after the patent had issued. But it is our contention that, of course, the sale was made when the order was accepted, which [6] was prior to the issuance of the patent.

Now, I gave instructions to my client to make sure that none of these amplifiers were sold to anyone except subcontractors or prime contractors of the Government, who had purchased them with the advice and consent--the knowledge and consent of the Government.

The Court: Well, instructions don't mean anything if they are disobeyed.

Mr. Lyon: Well, they weren't disobeyed exactly, your Honor, but here is the funny thing that happened. Feeling that there was some danger in this one amplifier being in the hands of Ramo-Woolridge, to which we could not assign a Government contract number, orders were given to pick it up, and it was picked up in August of this year.

That was after the filing of the motion for summary judgment. And in picking it up, apparently the local people wanted to keep Ramo-Woolridge satisfied, and so they gave him a demonstrator to

take its place. So we have the situation of every amplifier that has been sold to date, with this one exception, has been sold to and become the property of the United States Government.

This one amplifier was sold in January, the deal was made in January prior to the issuance of the patent, the delivery was in May after the issuance of the patent, and then there was an exchange in August. [7]

* * * * *

Mr. Fraser: Your Honor, we believe there are several reasons why the motion for summary judgment should be denied. With the court's permission, we would like to go into each of these in further detail, because we believe there is an ample showing that the motion in this case has been brought in bad faith.

First, the affidavits upon which the motion is based are defective for failure to comply with Federal Rule of Civil Procedure 56(e), which requires that copies of all documents referred to in the affidavits filed in connection with the motion for summary judgment be attached thereto or served therewith.

The first affidavit of Richard Silberman and Thomas [8] Hamilton, as well as the recent affidavit of Elbridge C. Titcomb, each make reference to Government purchase orders and Government contracts, no copy of which has ever been seen by the lawyers for the plaintiff.

* * * * *

The Court: This is a little different than any

other case, or than an ordinary case. This is a case where we have to interpret the statute which the Congress has passed and has decided that actions on patents which are manufactured solely for the Government shall be brought in the Court of Claims rather than as the ordinary action. So summary judgment is based upon that section, and there is no affidavit showing any other sale that I have been able to see or identify. Therefore, when an affidavit states that most of the sales were made on Government purchase orders, and lists them, it isn't necessary that the purchase order be [9] attached. It is an entirely different kind of proposition. This is not a case where you are trying to avoid an issue. This is a case where if they are made for the Government, this court has no jurisdiction over the case. [10]

* * * * *

Mr. Fraser: If the court please, we would like to direct the court's attention to a case, the case of Northhill Company v. Danforth, which was decided in the Northern District of California in 1943, 51 F. Supp. 928. In that case 99.41 per cent of the sales were sales to the Government, and only .59 per cent of the sales were to civilians, and it was said by the court that the de minimis doctrine did not apply and the District Court did have jurisdiction of the case.

The Court: I would not follow that. I have held in such circumstances that they are not going to keep a case in this court and give me jurisdiction. I would hold that particularly with only one

sale, as in this case, which was later on cancelled, and that that would not be sufficient to take it out of the statute. Otherwise you are making what has been made a beneficial law a Draconian law.

Mr. Fraser: We have Mr. Lyon's statement that the sale was cancelled, and that a demonstrator was delivered. However, if I didn't visit the West Coast corporation, one would think---

The Court: Well, I would hold that one sale in itself would not take it out of the statute. A sale means an offering to the public, and a single sale would not.

Mr. Fraser: May we direct your Honor's attention to the fact that four additional amplifiers were ordered on Ramo-Woolridge's [13] purchase order, which was confirmed by the defendant, and I have been told they expect delivery on these on September 27th.

The Court: It is one or the other. If a sale is made, it is made as of that particular time.

I don't know why you gentlemen are so afraid of going to the Court of Claims. The Court of Claims has as great power as we have.

Mr. Fraser: We are not afraid of going there, if necessary, but I seriously question whether we could stay in the Court of Claims because I don't think we could make a showing that these sales come within Section 1498. Certainly we didn't have, or, we don't have enough evidence before this court at this time.

The Court: But if I make a finding to that effect, then if you sue them in the Court of Claims,

they are not going to be in a position to question the ruling that they have induced me to make. They can't blow hot and cold between two different tribunals.

They can't say the District Court had no jurisdiction, and then say, "Now, we urge that the Court of Claims has no jurisdiction," because that would not be considered fair conduct before either court.

* * * * * [14]

You referred to my last opinion, you remember?

Mr. Fraser: Yes, *Avery v. Shuman Company*.

The Court: That is right, and then I cited quite a number of cases. But I remember one of the warnings by Judge Fee, saying that it is an easy way to dispose of the calendar, but don't do it.

But this is a peculiar thing, a peculiar statute, where the Congress has chosen to say this.

Now, is there a doubt when a showing is made that one sale may have been made or even four or five sales? That would not be a substantial enough amount to deprive the defendants of their right, and I don't think they could be.

Of course, a motion for summary judgment, if granted, is a final and appealable order, and if it is granted here, you would have not only my granting it, but if I am not sustained, why, you will be back here. If I am sustained, certainly no one can claim in the Court of Claims that when the Court of Appeals and I have said that you did not belong here, that anybody could question it.

It isn't a case of raising an inconsistent position. I had a problem this morning concerning a man

who pleaded [16] certain causes of action which were inconsistent. I said, "So what?" A man has that right, to bring in inconsistent claims, and always has in the common law field.

Mr. Fraser: May we remind your Honor of the *Bourne v. Edgecliff* case, where there had been a very small number of potentiometers sold to civilians, and your Honor overruled the motion for summary judgment in that case.

The Court: That was an entirely different situation. I remember that case, and I considered that amount to be very substantial in view of the limited scope of the use to which the potentiometers could be put.

I am not deciding this now. I am just raising these points so as to clarify my own thoughts.

Mr. Fraser: We would like to point out to the court that it is hard at this time to rely upon the statements that have been made by the proponents of the motion for the reason that they just filed an affidavit purporting to list all their sales and deliveries. Through a little detective work we found that wasn't true, and they didn't list them all.

Then they took a second look and filed another affidavit, which said that one of them had been delivered, and they got it back, and then a further one was delivered. Then we went forward with a little more investigation work, and found out that was not true.

The affidavits are incomplete, your Honor, and do not [17] resolve all the issues of fact and tell us of all the sales that were made.

How do we know, your Honor, but what there weren't a lot more sales? We have no way of getting to them. We have asked them to answer some interrogatories, but they just say, "Oh, no, we want to answer only on the issue of damages."

We want to place the entire thing before the court, and, again, we return to the fact that there has been absolutely no showing of an authorization or consent to the infringement of patents by the Government on any of these sales.

Certainly, all the communications from the defendant Cohu to Ramo-Woolridge were available to Mr. Hamilton and Mr. Silberman, and yet they executed false affidavits. How can we believe anything they say?

The Court: Of course, the Rules, if they raise any question—well, my thought is that even if they sold five, that would not be substantial enough to deprive the defendants of the benefit of the statute, because there must be a substantial amount, and here there are uncontradicted affidavits that they are all manufactured for a certain purpose, and are used only under contractors. [18]

* * * * *

The Court: Anything further?

Mr. Fraser: Your Honor, the issues of the interrogatories and the motion for discovery.

The Court: I think I am going to grant the motion for summary judgment, which makes it unnecessary to pass upon the other. [23]

* * * * *

Mr. Fraser: May I ask a question, your Honor?

The Court: Yes.

Mr. Fraser: Is the court going to rule that there was authorization or consent as to each one of these sales?

The Court: I don't need to do that, because I think that can be implied from use on Government property, because I have handled many of these cases, and I am not aware that a direct authorization is ever given. If a man is a subcontractor and works on airplanes which are used by the Government, the delivery to him of products which go into them is delivery to the Government, and he, by accepting them, acts as the agent of the Government. That is as far as I will go.

* * * * *

This is an appealable order, and it can be reduced to a very inexpensive one. Your record is very short, and you [25] can be on your way. The courts are up to date, and it may well be that in three months you can have a ruling, and nothing will be lost. There would not be much delay in the trial of this case, because I cannot give you a trial date now until spring. [26]

* * * * *

[Endorsed]: Filed November 17, 1958.

[Endorsed]: No. 16266. United States Court of Appeals for the Ninth Circuit. Neff Instrument Corporation, a Corporation, Appellant, vs. CoHu Electronics, Inc., and Neely Enterprises, Appellees. Transcript of Record. Appeal from the United States District Court for the Southern District of California, Central Division.

Filed: November 19, 1958.

Docketed: December 3, 1958.

/s/ PAUL P. O'BRIEN,

Clerk of the United States Court of Appeals for
the Ninth Circuit.

In The United States Court of Appeals
For The Ninth Circuit

No. 16266

NEFF INSTRUMENT CORPORATION, a Cali-
fornia corporation, Appellant,

vs.

COHU ELECTRONICS, INC., a Delaware cor-
poration, and NEELY ENTERPRISES, a
California corporation, Appellees.

STATEMENT OF POINTS ON APPEAL

The appellant intends to rely upon the following points in support of its appeal from the judgment of the United States District Court:

I.

The District Court erred in granting the motion of the defendants for a summary judgment and in granting summary judgment to the defendants.

II.

The District Court erred in granting summary judgment since genuine issues of material facts existed.

III.

The District Court erred in awarding summary judgment to the defendants since the defendants were not entitled to summary judgment as a matter of law.

IV.

The District Court erred in making its findings of fact I, VII, VIII, IX, XII and XIII and that each of said findings of fact is clearly erroneous.

V.

The District Court erred in refusing to find that the order for four additional 114-A Cohu Electronics amplifiers, placed with the defendants by the Ramo-Wooldridge Corporation on or about July 15, 1958, was confirmed on August 9, 1958, and that none of the 114-A amplifiers sold pursuant to the foregoing order and confirmation were manufactured and sold pursuant to a government contract.

VI.

The District Court erred in refusing to find a lack of authorization or consent given by the Gov-

ernment to the defendants for the infringement of the plaintiff's patent No. 2,832,848 in the manufacture, use and sale of Model 114-A amplifiers.

VII.

The District Court erred in refusing to find instances of manufacture, use or sale of Model 114-A amplifiers other than those set forth in findings of fact VII, VIII, IX, X, XI, XII and XIII.

VIII.

The District Court erred in refusing to find that the affidavits filed by defendants in support of their notice for summary judgment failed to comply with the requirements of Federal Rule of Civil Procedure 56(e) in that no copy of any of the several documents referred to in the affidavits was filed with the District Court or served on the plaintiff.

IX.

The District Court erred as a matter of law in making its conclusions of law I, II and III.

Dated this 8th day of December, 1958.

/s/ ROBERT H. FRASER,
Attorney for Plaintiff-Appellant
Neff Instrument Corporation.

Affidavit of Service by Mail Attached.

[Endorsed]: Filed December 9, 1958. Paul P. O'Brien, Clerk.

[Title of Court of Appeals and Cause.]

DESIGNATION OF RECORD
ON APPEAL

To The Defendants, Cohu Electronics, Inc. and
Neely Enterprises and to Lyon and Lyon and
Charles G. Lyon, Their Attorneys:

You and Each of You Will Please Take Notice
that the plaintiff hereby designates the following
documents and transcript of proceedings to be in-
cluded in the record on appeal pursuant to Rule 17
of the Court of Appeals:

Affidavit of Gerald Cain.

Affidavit of Earl C. Davis.

Affidavit of Bruce C. Godwin.

Affidavit of Thomas M. Hamilton.

Affidavit of Glyn A. Neff in opposition to defend-
ants' Motion for Summary Judgment.

Affidavit of William R. Saxon.

Affidavit of Richard T. Silberman and Thomas
M. Hamilton.

Affidavit of Elbridge C. Titecomb.

Affidavit in opposition to Defendants' Motion for
Summary Judgment (Robert H. Fraser).

Answer.

Complaint.

Designation of Record on Appeal.

Findings of Fact, Conclusions of Law and Judg-
ment.

Pages 1 and 2 and lines 1 through 6 of page 3 of
Memorandum in support of objections to Plaintiff's

Interrogatories by Defendant Cohu Electronics, Inc.

Pages 1 and 2 and lines 1 through 6 of page 3 of Memorandum in support of objections to Plaintiff's Interrogatories by Defendant Neely Enterprises.

Notice of Appeal.

Page 3, lines 14 through 18 of Objections to Findings of Fact and Conclusions of Law.

Plaintiff's Interrogatories to Defendant Cohu Electronics, Inc.

Plaintiff's Interrogatories to Defendant Neely Enterprises.

Supplemental affidavit of Robert H. Fraser.

Portions of the transcript of proceedings of Monday, September 22, 1958 as follows:

Page 6, line 9 through page 7, line 25. Page 8, line 13 through page 9, line 4. Page 9, line 15 through page 10, line 4. Page 13, line 3 through page 14, line 23. Page 16, lines 5 through 20. Page 17, line 4 through page 18, line 21. Page 23, lines 6 through 11. Page 25, lines 1 through 13. Page 25, line 24 through page 26 line 5.

Dated this 8th day of December, 1958.

/s/ ROBERT H. FRASER,

Attorney for Plaintiff-Appellant
Neff Instrument Corporation.

Affidavit of Service by Mail Attached.

[Endorsed]: Filed December 9, 1958. Paul P. O'Brien, Clerk.